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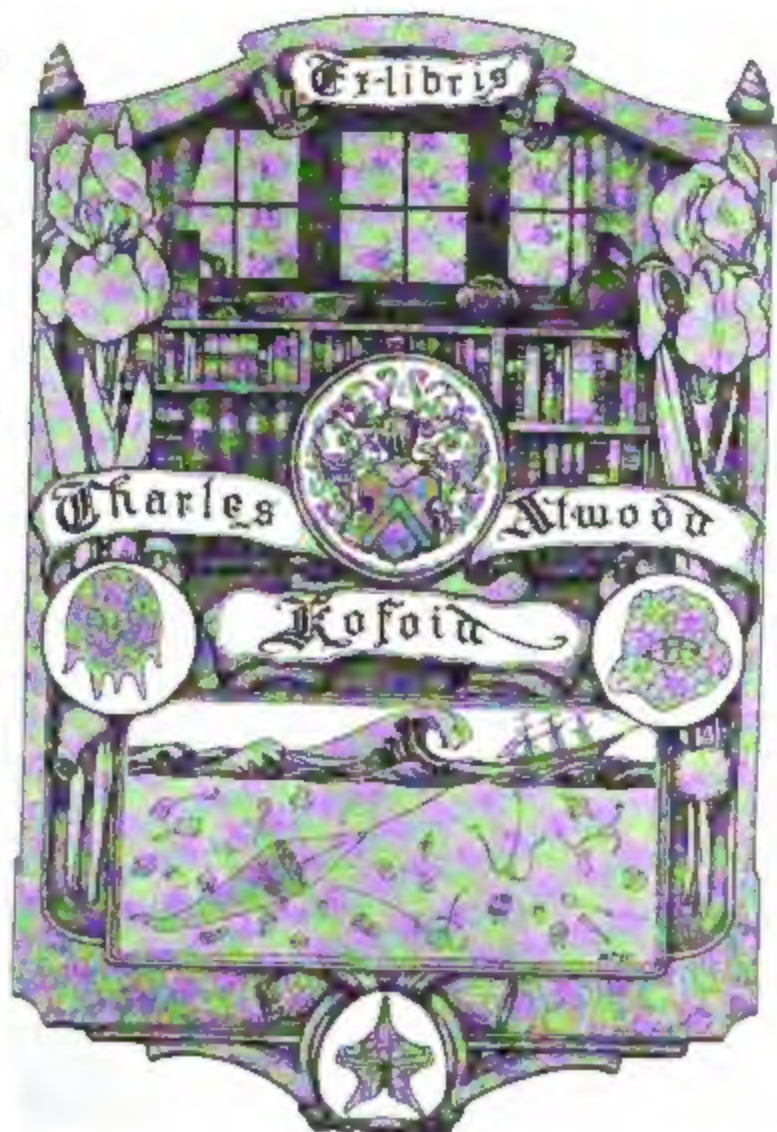
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GEORGIA

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HISTORICAL AND INDUSTRIAL

BY THE

DEPARTMENT OF AGRICULTURE

ILLUSTRATED

O. B. STEVENS, Commissioner

R. F. WRIGHT, Asst. Commissioner

ATLANTA, GA.

GEO. W. HARRISON, STATE PRINTER
(THE FRANKLIN PRINTING AND PUBLISHING CO.)

1901

Not lost

PREFACE.

Under the provisions of the organic law establishing the Department of Agriculture of the State of Georgia, there was issued a "Hand Book of Georgia," under the direction of Dr. Thos. P. Janes, the first Commissioner of Agriculture; under the direction of his successor, Hon. J. T. Henderson, the "Commonwealth of Georgia" was published; and under his successor, Hon. R. T. Nesbitt, there was issued "Georgia and Her Resources."

The growing demand for information concerning the industrial resources and possibilities of Georgia, as shown by inquiries almost daily received, not only from our own State, but also from every section of the Union, has led to the publication of this work, which we have entitled "Georgia: Historical and Industrial."

We have freely used the publications of our predecessors and are largely indebted also for much valuable information to "White's Historical Collections of Georgia," and other works on our State, including "The Story of Georgia and the Georgia People," by Dr. George G. Smith.

Much information concerning the geology of Georgia has been obtained from the bulletins issued under the direction of the State Geologist, W. S. Yeates, and his assistant, W. S. McCallie, and former assistant, Francis P. King. For much of the article on the geology of Georgia we owe thanks to Prof. S. P. Jones, recently appointed assistant State Geologist.

Other sources of information on which we have relied are the answers to questions sent out by this department to intelligent gentlemen in every county in Georgia, and the United States Census Reports for 1890 and 1900. The information which could not be obtained in time for the body of the work has been published in the appendix at the end of this volume.

Special thanks are due to the Central of Georgia Railway for the loan of many of the cuts with which this work is embellished, and to the Southern Railway for similar favors.

In this connection we take occasion to express our appreciation of the service rendered by Congressman J. M. Griggs, not only to the State of Georgia, but also to all the States of the Union, by his successful effort to secure the enactment of a Federal law, allowing to all the State departments of Agriculture the privilege of sending through the mails all paper-covered agricultural bulletins at one cent a pound, instead of the former rate of half a cent an ounce.

→ We wish also to express our obligations to Prof. Jos. T. Derry, one of our Georgia historians, for valuable assistance rendered by him in the laborious task of the preparation of this work.

We send forth this volume with the hope that it may prove beneficial to our State, and receive the approbation of those whom we most desire to please—the people of Georgia.

O. B. STEVENS, Commissioner of Agriculture.

R. F. WRIGHT, Assistant.

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ERRATA.

On page 161, in the last line of the first paragraph, instead of "5,000 pounds" read "500 pounds"; and in the next line above "cotton seed" should be "seed cotton."

On page 411, third line from the end of the page for "1840" read "1844."

On page 791, in the middle of the second line of the second paragraph, for "dairy cows" read "dairy farms."

On page 800 in next to the last line in the first paragraph on Quitman county, for "Big Potato creek" read "Pataula creek."



GEN. JAMES EDWARD OGLETHORPE.



TOMICHIHI AND NEPHEW.

GEORGIA:

HISTORICAL AND INDUSTRIAL.

CHAPTER I.

HISTORICAL.

In 1732 a number of benevolent gentlemen of London conceived the idea of founding a home for the poor of Great Britain and a place of refuge for the Salzburgers and other persecuted sects of the continent of Europe. It was to be a model colony, in which both slavery and rum would be prohibited. It was to be also somewhat of a military colony, a barrier against the hostile encroachments of the Spaniards upon the Province of South Carolina. The charter for its establishment was obtained from George II., king of England, in June, 1732. James Edward Oglethorpe, a gentleman of great benevolence, marked ability and experience in military affairs, being selected by the trustees to take charge of the new colony, set sail from England in November, 1732, with one hundred and sixteen emigrants. After a voyage of nearly two months they arrived in the harbor of Charleston (then known as Charlestown), S. C., where they met a gracious welcome from the Carolinians and their governor, Robert Johnson, who furnished them with provisions, stock, vessels to convey additional supplies to the Savannah river, and a company of soldiers to protect them against the Indians until they could build houses and fortifications.

Leaving his people for a few days at Beaufort, South Carolina, Oglethorpe ascended the Savannah until he came to Yamacraw Bluff, which he selected for his settlement. On February 12th the colonists arrived, and on the 20th was commenced the first house of the new city, which Oglethorpe called Savannah from the name of the river on whose banks it stands. Tomochichi, chief of the Yamacraws, immediately sought an alliance with Oglethorpe, who made a treaty with him, as he did also

with the Creeks, the Muscogees, and even with the Cherokees of the mountains and the Choctaws on the borders of the Gulf of Mexico. Like William Penn, Oglethorpe purchased from the Indians the title to the lands where he founded his settlements, and so long as he remained in Georgia peace prevailed between the red men and the white.

In March, 1734, the colony was strengthened by the arrival of seventy-eight Salzburgers from Germany. These men, who had been driven from their homes by terrible persecution, found rest and safety higher up the Savannah in Effingham county, at a place which they called Ebenezer, the "Stone of Help"; "for," said they, "the Lord hath delivered us out of the hands of our enemies." Goethe's beautiful poem, "Herman and Dorothea" was founded upon an incident which occurred during the exodus of the Salzburgers.

Oglethorpe was diligent in establishing settlements, locating a Scotch settlement at Darien, a company of immigrants at Frederica, on Saint Simon's Island, and trading posts at Augusta. In February, 1736, among two hundred and twenty-seven immigrants who came over were John and Charles Wesley, afterwards so celebrated as the founders of Methodism. Their purpose was to preach the gospel to the Indians and also to the settlers. Two years later came another celebrated Methodist minister, the Rev. George Whitefield, who resided in the colony several years and founded the Orphan House at Bethesda, a few miles from Savannah.

The Spaniards, who had settled Florida nearly one hundred years before the first permanent English settlement at Jamestown, regarding the settlements in Georgia as an intrusion upon their rights, determined to expel the English. In anticipation of war Oglethorpe went home, and having raised a regiment of six hundred men for the defense of his colony, returned to America and was appointed commander-in-chief of the militia of South Carolina and Georgia. Marching at the head of two thousand men of the two colonies, with friendly Indians included, he invaded Florida, meeting however, with but partial success. Later on the Spaniards invading Georgia with a land and naval force of three thousand men, landed on St. Simon's Island. Oglethorpe, who at this time had barely eight hundred men available, met the Spaniards and inflicted on them so dreadful a defeat that the scene of the conflict has ever since been known as the Bloody Marsh.

So long as Oglethorpe remained in Georgia rum and slavery were prohibited; but in 1743 he returned to England, and four years later restrictions were removed, and Georgia, like all the other English colonies of that day, admitted both slavery and spirituous liquors. That

same year the colony was in great danger from the machinations of a man named Bosomworth, former chaplain of Oglethorpe's regiment, who, having married Mary Musgrove, an Indian claiming to be queen of the Creeks, marched at the head of a large Indian force upon Savannah threatening to exterminate the colonists unless his claims in behalf of his wife were complied with. The undaunted courage of the authorities, who seized the leaders and awed the Indians into submission, saved the colony.

In 1752 the trustees of Georgia surrendered their rights to the crown, and in 1754 John Reynolds was appointed governor. At the close of the French and Indian war in 1763, Spain, who had been the ally of France, ceded to England her possessions of East and West Florida. At this time the boundaries of Georgia, which had embraced a territory between the Savannah and the Altamaha rivers, were extended to the Mississippi on the west and on the south to latitude 31° and the St. Mary's river. Thus Georgia embraced not only the present State, but also the greater part of what we now know as Alabama and Mississippi.

THE REVOLUTION.

Georgia joined with the other colonies in resisting the aggressions of the mother country. On May 11th, 1775, the Savannah powder magazine was taken possession of, and in July a British vessel at Tybee, having 13,000 pounds of powder for the use of British troops, was captured by thirty volunteers under the lead of Commodore Bowen and Colonel Joseph Habersham. Five thousand pounds were sent to the Continental army at Boston, and the rest was stored in the magazine. Another noted exploit was performed near Savannah in March, 1776. Some loyalist planters near Savannah had loaded eleven merchant vessels and prepared for a sea voyage. Some British war vessels, for the purpose of assisting these tories, moved up the river and threatened Savannah. But the Georgians under Colonel McIntosh, aided by the Carolinians under Colonel Bull, burned three of these merchant vessels and rendered six unfit for service.

In April, 1776, Georgia instructed her delegates in Congress to vote for independence, which, on July 4th of the same year, was declared by the unanimous vote of all the delegates of the thirteen colonies in Congress assembled. The signers of the declaration on the part of Georgia were Button Gwinnett, Lyman Hall and George Walton. For two years Georgia escaped serious invasion, but in December, 1778, Savannah was captured, and Augusta soon after. The defeat of the Tories at Kettle creek by the Carolinians under Pickens, and the Georgians

under John Dooley and Elijah Clarke, resulted in the recapture of Augusta by the Americans, who, notwithstanding the defeat of Ashe at Brier Creek and the repulse of the allied French and American armies before Savannah, continued to hold all upper Georgia until after the fall of Charleston in 1780. While the allied armies were before Savannah, Colonel John White of the Georgia Continentals, by a skillful stratagem, captured five British vessels, one hundred and thirty stands of arms and one hundred and eleven British soldiers. Although after the fall of Charleston South Carolina and Georgia were both overrun, the patriot bands of those two States under their favorite leaders continued the struggle. The Georgians shared in the victories of King's Mountain and Cowpens, and Colonel Elijah Clarke, the Marion of Georgia, after failing in one attempt to capture Augusta, in the next year began another siege of that post, which was made successful by the arrival of General Pickens of South Carolina, and "Light Horse Harry" Lee of Virginia, with a considerable force. Almost the last fight of the Revolution was Wayne's victory over the Indian allies of the British near Savannah on the night of June 23d, 1782, a little over eight months after the surrender of Cornwallis at Yorktown. On the 11th of July, 1782, Savannah was evacuated by the British and the authority of Georgia was established over all her borders.

On the 2d of January, 1788, the Constitution of the United States was ratified by a convention of delegates from the different counties of Georgia, assembled at Augusta. The following is a list of the delegates of the ratifying convention:

John Wereat, President, and delegate from the county of Richmond

William Stephens, Joseph Habersham, Chatham county.

Jenkin Davis, N. Brownson, Effingham county.

Edward Telfair, H. Todd, Burke county.

William Few, James McNeil, Richmond county.

George Matthews, Florence Sullivan, John King, Wilkes county.

James Powell, John Elliott, James Maxwell, Liberty county.

George Handley, Christopher Hillary, J. Milton, Glynn county.

Henry Osborne, James Seagrove, Jacob Weed, Camden county.

Jared Irwin, John Rutherford, Washington county.

Robert Christmas, Thomas Daniell, R. Middleton, Greene county.

UNDER THE CONSTITUTION, 1788 TO 1860.

Under the government established by the Federal Constitution, Georgia increased rapidly in population and wealth. Settlers poured into the State from North Carolina, Virginia and States farther north. Of



JASPER MONUMENT, SAVANNAH, GA.

these the Virginians were so numerous that the Indians, who still occupied many of the fairest portions of the State, frequently spoke of the Georgians as Virginians.

One of the most important events in the history of Georgia is the invention of the cotton gin by Eli Whitney, in 1794. Prior to that time the separation of the seed from the lint was so difficult as to limit the cultivation of cotton. This had to be done by hand, a task being four pounds of lint cotton per week for each head of a family, working at night, in addition to the usual field work. At this rate it would take one person two years to turn out the quantity of cotton contained in one average standard bale, or 500 pounds. One gin, in proportion to its power and saw capacity, will gin out from three to fifteen 500-pound bales in one day. At the time of this important invention Mr. Whitney was the guest of his aunt, the widow of General Nathaniel Greene. Probably no invention ever caused such rapid development of the industry with which it was associated. In 1793 the exportation of cotton from the United States was 487,500 pounds, or 975 bales, estimated at 500 pounds to the bale. In 1900 the production in the United States was 9,345,391 bales.

The Yazoo Land Act, passed by the legislature of 1795, conveying to four associations thirty-five million acres of land lying between the Mississippi, Tennessee, Coosa, Alabama and Mobile rivers, for five hundred thousand dollars, produced great excitement throughout Georgia. Though a bill ratifying the sale of these lands passed both houses of Congress, a subsequent legislature, under the influence of General James Jackson, repudiated the Yazoo act and committed the records of it to the flames, at the same time ordering the purchase money to be refunded to whomsoever it might belong. Twenty years, however, elapsed before a final settlement was reached.

In 1802 Georgia ceded to the Federal government all her lands west of the Chattahoochee, embracing nearly one hundred thousand square miles of territory, the greater part of the present States of Alabama and Mississippi. Thus Georgia, like Virginia, is a "Mother of States."

The purchase from France by the United States, in 1803, of the vast Louisiana territory was of great benefit to Georgia. That territory had for a long time been under the dominion of Spain, whose agents frequently incited the Indians of the western border to hostile acts. Being no longer subject to these annoyances, new counties were laid off and towns and villages sprang up in the wilderness. In 1807 the new town of Milledgeville became the seat of government.

During the second war with Great Britain, 1812-15, the Indians of

Alabama perpetrated horrible massacres. The Georgians under General John Floyd, and the Tennesseans under General Coffee, with Major-General Andrew Jackson of Tennessee as commander-in-chief, defeated the Indians in battle after battle. The power of the savages was finally crushed by the great battle of Tohopeka, or the "Horse-shoe Bend" in Alabama, and the Indians sued for peace.

The first steampship that ever crossed the Atlantic Ocean, though built in New York, was owned in Savannah, and from that port started on its voyage to Liverpool in 1819. It was named "Savannah."

When, in 1821, Florida was ceded by Spain to the United States and thus passed forever from the hands of the ancient enemy of Georgia, great was the rejoicing throughout the State.

When Georgia ceded her western lands the United States agreed to extinguish the Indian title to the same. This was not done rapidly enough to suit the Georgians and a controversy arose between the State and the Federal government, during which Governor Troup proclaimed the most ultra State rights doctrine, and defied President John Quincy Adams. Georgia triumphed in the controversy, and when Andrew Jackson became president he did all in his power to promote the wishes of the Georgians, with the result that all the Indians east of the Mississippi were finally transferred to the Indian Territory, west of the great river.

In the Mexican War (May 8, 1846 to May 30, 1848), Georgia's sons promptly answered the call to arms, and faithfully discharged the duties assigned them. Among the most distinguished of the officers in the regular army of the United States were sons of Georgia, of whom Colonel James S. McIntosh was killed at Molino del Rey, and W. H. T. Walker desperately wounded at the storming of Chapultepec.

THE WAR BETWEEN THE STATES.

In the lamentable conflict of arms between the Northern and Southern States of the Union (1861-1865), Georgia bore a prominent part. This war was the outgrowth of a long struggle for the balance of power between the commercial and manufacturing States on the one side, and the purely agricultural States on the other, in combination with opposing theories as to the real nature of our Federal Union. This struggle became manifest in 1820 on the application of Missouri for admission into the Union with a Constitution allowing slavery, an institution which differentiated the opposing groups of States. The opposition to the admission of Missouri was not based on moral grounds, but on the

idea that it gave to the South a preponderance of influence. By the Missouri compromise the dangerous dispute was settled for a time; but the acquisition of new territory from Mexico in 1848 reopened the old quarrel, and slavery, now opposed by some on moral grounds but by the great majority for reasons purely political, became the occasion of the most stupendous conflict of modern times.

In this fierce struggle, for which Georgia furnished ninety-four regiments and thirtysix battalions, embracing every arm of the service, the blood of her sons was freely poured out on every battlefield from Pennsylvania to the Mississippi, and from the Ohio to the Gulf, and (if we include the thousands who had emigrated to the States west of the "Father of Waters"), in every important combat throughout the bounds of the Trans-Mississippi department of the Southern Confederacy. On Georgia's soil were fought the great battles of Chickamauga, Resaca, New Hope Church (a series of engagements from May 25th to June 4th), Kennesaw Mountain, Peachtree Creek, two fierce battles at Atlanta (July 22 and 28), Jonesboro, and numerous smaller engagements and skirmishes. Sherman's march to the sea, when almost the entire military force of the State was absent in Virginia or Tennessee, scattered ruthless destruction all along its path, and the final disastrous close of the long continued war wrecked the hopes and fortunes of her people.

AFTER THE WAR.

But the brave men, who with constantly diminishing strength and exhausted means had maintained so heroic a struggle against overwhelming numbers and boundless resources, lost no time in idle repining, but with the energy, pluck and perseverance characteristic of the Anglo-American, wrought out by the blessing of God the redemption of their State. During the dark days of reconstruction they did not yield in base submission to oppression and wrong, but maintaining their rights in every legitimate way, shared at length in the final triumph of the whole South in the courts and Congress of the nation. From the undaunted energy and pluck of the Old South sprang the New South, with its rapid development along all lines.

While Georgia is yet poor compared with States not injured by the war, she stands in the front rank of those that did suffer, and in the ratio of progress compares favorably with those of the North which even prospered during all the years of strife, oppression and wrong.

THE WOMEN OF THE SOUTH.

During the tremendous conflict that shook this continent, the women of the South exhibited a heroism and devotion to principle scarcely equalled and never surpassed since time began. With aching hearts they bade their loved ones good-bye, and through tearful eyes gave them a smile of hope, speaking at the same time brave words that nerved the warrior's soul to deeds of daring unparalleled in the records of this world. With undaunted spirit they bore privations, perils and heart-rending bereavements, and when, after the final catastrophe the survivors returned downcast and almost despairing, it was faithful woman's smile that bade them hope again and stirred them to that high endeavor, which, amid the most appalling surroundings, brought forth the New South from the ashes of the Old, redeeming by the help of God their beloved States from oppression and ruin, and starting them again upon the road to prosperity and power. Even before the débris of our shattered fortunes had been cleared away, noble women turned their attention to the preservation of the memory of the heroic deeds that wreathed the Southland's brow with Fame's unfading chaplet, and mid their poverty began the erection of monuments to the illustrious dead, gathered the scattered remains of heroes from many a battle-field, marked their last resting places with headstones, and organized into societies whose chief object is to keep alive the remembrance of the heroic deeds of the South's heroic men, whether living or dead.

THE SLAVES DURING THE WAR.

Nor should we forget that humble class whose ancestors were brought from their African homes in Dutch, British and New England ships and sold to the white men who, by the aid of the stalwart muscle of the sons of Africa, cleared the wilderness and prepared the way for thriving farms, great plantations and growing cities. Though the legislatures of some Southern colonies endeavored to prevent the importation of these Africans, the British government set their acts aside in the interest of English and New England traders. Even after the establishment of American independence the traders of New England, who had been among the first to engage in the African slave trade, continued it to the year 1808, when the traffic was abolished by Congressional enactment. These same New England traders, previous to that date, often violated the laws of such Southern States as had prohibited the traffic by smuggling slaves into out-of-the-way places and selling them to those who were ready to purchase. Thus the South became so stocked with



GEORGIA CONFEDERATE MONUMENT AT CHICKAMAUGA PARK.

TO THE LASTING MEMORY OF HER SONS

Who fought on this field—

Those who fought and lived, and those who fought and died

Those who gave much and those who gave all—

Georgia

ERECTS THIS MONUMENT.

negroes that the Southern people considered emancipation under any condition too dangerous an experiment to be even thought of.

Yet, such were the kindly relations that for the most part existed between masters and slaves, that even after the war had become on the part of the North a struggle for emancipation as well as for union, the negroes remained in peace on the plantations, made the crops that supported the armies in the field and their families at home, and with a fidelity that amazed the enemies and slanderers of the South protected the wives and children of the men who, far from their defenseless loved ones, stood upon the firing-line striving with steadily diminishing numbers to keep back the ever increasing hosts gathered from the fields and crowded cities of the North and of Europe. Many faithful slaves went with their masters to the tented field, cooked and did other service for them, nursed them when sick, and, if they died in battle or hospital, wept over them, and returned with the lifeless bodies to lay them beside kindred dead in the family burial ground.

The tender care shown for them by kind masters and mistresses in sickness and old age, the pious instructions of godly women and devoted missionaries, among which latter class some in malarial districts (harmless to the negro but dangerous to the white man), laid down their lives for the salvation of the slave, created in the bosom of the negro a devotion and loyalty which even the results of the war and the teachings of fanatics have not been able to efface from the minds and hearts of the great majority of the older members of the race. Acts of violence such as have in recent years disgraced so many of the younger generation of negroes were unknown before the war, or even when the mighty armies of invaders were thundering at our gates. The estrangement between the races and the outcroppings of violence in some quarters are due to the teaching of those who have endeavored to preach a political and even social equality that will never be allowed.

The majority of our colored population are still contentedly toiling in the fields, helping to increase the wealth of the State, and acquiring property themselves, in which they have the encouragement and aid of their white neighbors. There are no agricultural laborers so well suited to large sections of our State as are the majority of our negro population.

THE SPANISH-AMERICAN WAR AND THE WAR IN THE PHILIPPINES.

In the restoration of good will between the States of the Union, the sons of Georgia have been conspicuous, and when the United States be-

came involved in war with Spain, Georgia furnished according to population more volunteers than any other State of the Union. General Joseph Wheeler, a son of Georgia and adopted son of Alabama, nobly illustrated those States at Santiago, and many gallant young Georgia officers of the regular army and navy of the United States, both in Cuba and in the Philippines, proved that the Confederate blood in their veins did not diminish, but rather increased their devotion to the flag of the restored Union. Georgia furnished three regiments for the Spanish-American war, and a fourth one, "Ray's Immunes," was made up almost entirely of Georgians. The twenty-ninth regiment of the United States Volunteers in the Philippines consisted almost entirely of Georgians.

GOVERNORS OF GEORGIA.

The governors of Georgia, from its first settlement in 1733 to the present time (1900), are as follows:

Under the Trustees.

James Edward Oglethorpe, July 15th, 1732, to July 11, 1743.

William Stephens, acting in absence of Oglethorpe, from July 11, 1743, to April 8, 1751.

Henry Parker, Acting Governor from April 8, 1751, to October 1, 1754.

Under the Crown.

John Reynolds, from October 1, 1754, to February 15, 1757.

Henry Ellis, from February 16, 1757, to October 31, 1760.

James Wright, from October 31, 1760, to July 11, 1782.

James Habersham, President of Council and Acting Governor from July 2, 1771, to February 11, 1773.

Under the American Government.

William Ewen, President of Council of Safety from June 22, 1775, to January 20, 1776.

Archibald Bulloch, President of the Provincial Council and Commander-in-Chief from January 20, 1776, to February 22, 1777.

Button Gwinnett, with same title as last, to May 8, 1777.

Governors Under the New Constitution of Georgia of 1777.

John Adam Treutlen, from May 8, 1777, to January 8, 1778.

John Houston, from January 8, 1778, to December 29, 1778.

John Wereat, President of Executive Council and Acting Governor from December 29, 1778, to November 4, 1779.

George Walton, from November 4, 1779, to January 7, 1780.

Richard Howley, from January 7, 1780, to January 7, 1781.

Stephen Heard, President of Executive council and Acting Governor from January 7, 1781, to August 15, 1781.

Nathan Brownson, from August 16, 1781, to January 8, 1782.

John Martin, from January 8, 1782, to January 9, 1783.

Lyman Hall, from January 9, 1783, to January 9, 1784.

John Houston, from January 9, 1784, to January 14, 1785.

Samuel Elbert, from January 14, 1785, to January 9, 1786.

Edward Telfair, from January 9, 1786, to January 9, 1787.

George Matthews, from January 9, 1787, to January 25, 1788.

George Handley, from January 25, 1788, to January 9, 1789.

George Walton, from January 9, 1789, to November 9, 1790.

Edward Telfair, from November 9, 1790, to November 7, 1793.

George Matthews, from November 7, 1793, to January, 15, 1796.

Jared Irwin, from January 17, 1796, to January 11, 1798.

James Jackson, from January 12, 1798, to March 3, 1801, being the first governor under the Constitution of 1798.

Under the State Constitution of 1798.

After James Jackson, David Emanuel, President of Senate and Acting Governor from March 3, 1801, to November 7, 1801.

Josiah Tatnall, from November 7, 1801, to November 4, 1802.

John Milledge, from November 4, 1802, to September 23, 1806.

Jared Irwin, President of the Senate and Acting Governor from September 23, 1806, to November 7, 1806.

Jared Irwin, Governor from November 7, 1806, to November 9, 1809.

David B. Mitchell, from November 9, 1809, to November 9, 1813.

Peter Early, from November 9, 1813, to November 9, 1815.

David B. Mitchell, from November 9, 1815, to March 4, 1817 (resigned).

William Rabun, President of Senate and Acting Governor until November, 1817, from which time he was governor until October 25, 1819, when he died.

Matthew Talbot, President of Senate and Acting Governor until November 13, 1819.

John Clark, Governor from November, 1819, to November, 1823.

George M. Troup, Governor from November, 1823, to November, 1827.

John Forsyth, from November, 1827, to November, 1829.

George R. Gilmer, from November, 1829, to November, 1831.

Wilson Lumpkin, from November, 1831, to November, 1835.

William Schley, from November, 1835, to November, 1837.

George R. Gilmer, from November, 1837, to November, 1839.

Charles J. McDonald, from November, 1839, to November, 1843.

George W. Crawford, from November, 1843, to November, 1847.

George W. Town, from November, 1847, to November, 1851.

Howell Cobb, from November, 1851, to November, 1853.

Herschel V. Johnson, from November, 1853, to November, 1857.

Joseph E. Brown, from November, 1857, to July, 1865.

James Johnson, Provisional Governor (appointed by President Andrew Johnson), from July, 1865, to December, 1865, until an election could be held by the people.

Charles J. Jenkins, Governor from December, 1865, to January, 1868, when he was deposed by General Meade, acting under the reconstruction measures of Congress, and Brigadier-General Thomas H. Ruger of the United States army, was appointed to act as military governor until July, 1868, at which time Rufus B. Bullock, elected under the reconstruction measures, became Governor.

Under the Constitution of 1868.

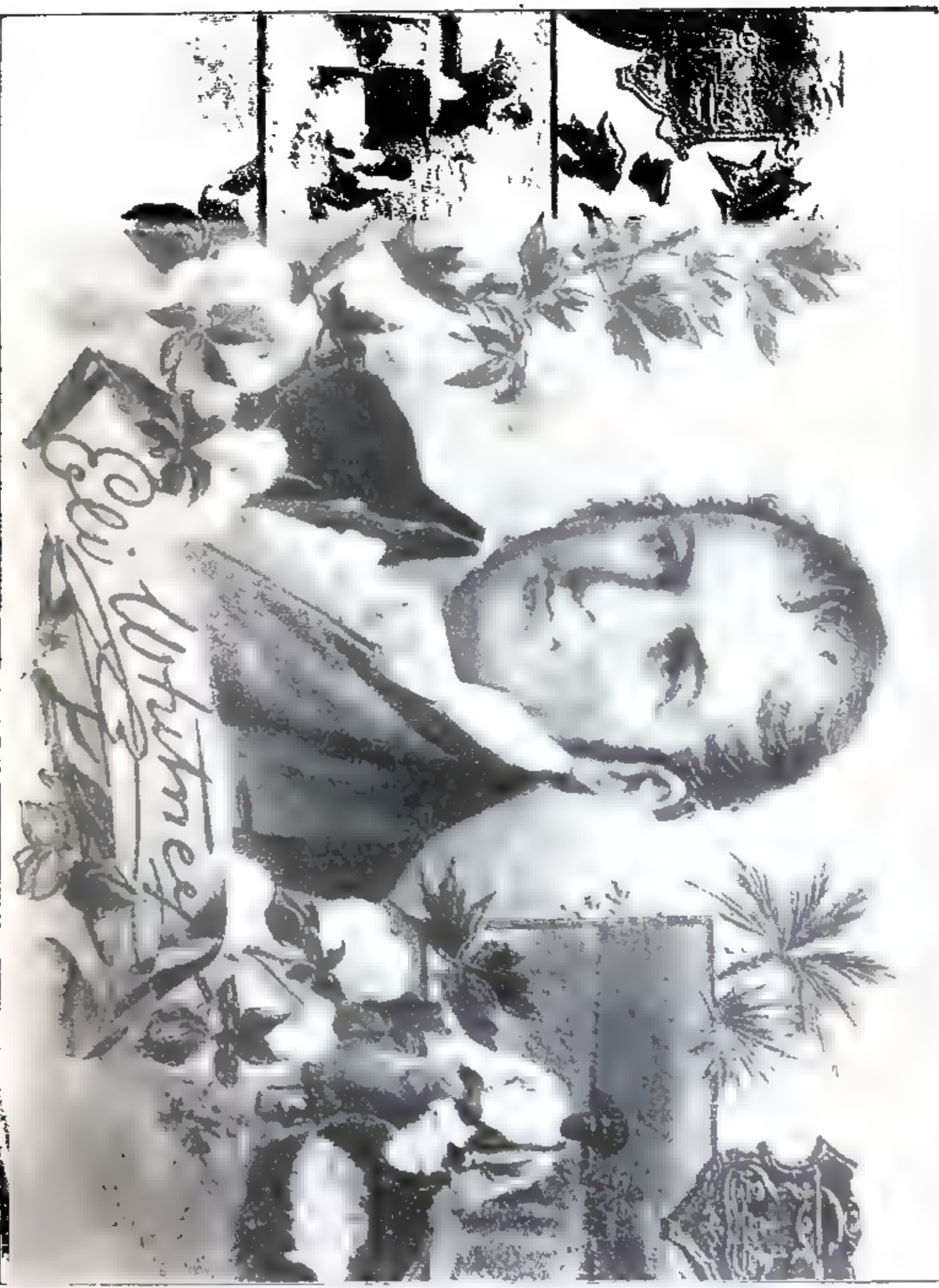
Rufus B. Bullock, Governor from July, 1868, to October 30, 1871, when he resigned his office.

Benjamin Conley, President of Senate and Acting Governor from October 30, 1871, to January 12, 1872.

James M. Smith, Governor from January 12, 1872, to January 12, 1877.

When Governor Jenkins was deposed, he took with him the Great Seal of Georgia, refusing to give it up, but after the inauguration of Governor Smith he turned the Seal over to him as the first governor elected by the untrammelled voice of the people since 1868. On that occasion he received the thanks of the legislature, and a handsome medal was voted to him for his fidelity to the interests and honor of Georgia. This event deserves to rank with the Charter Oak incident of colonial days in Connecticut.

General Alfred H. Colquitt, Governor from January 12, 1877, to November, 1882, beginning under the Constitution of 1868 and ending under that of 1877.



By permission of "The Holmes" "A. Holmes and Elizabeth County"

Under Constitution of 1877.

Alfred H. Colquitt's second term, ending November, 1882.

Alexander H. Stephens, from November, 1882, to March 4, 1883, when he died.

James L. Boynton, President of the Senate and Acting Governor from March 5, 1883, to May 10, 1883.

H. D. McDaniel, from May 10, 1883, to November, 1886.

John B. Gordon, from November, 1886, to November, 1890.

W. J. Northen, from November, 1890, to November, 1894.

W. Y. Atkinson, from November, 1894, to November, 1898.

Allen D. Candler, inaugurated November, 1898, the present incumbent.

INDUSTRIAL PROGRESS OF GEORGIA.

Scarcely had the war ended before the Georgians set to work to rebuild their ruined homes and fortunes. The city of Atlanta afforded at that time a striking evidence of the marvelous pluck and energy of the people. In the spring of 1865, even before the close of hostilities, the old citizens began to return, and Atlanta springing phoenix-like from her ashes was already starting anew on the road to prosperity and wealth with an impetus which even the succeeding days of force and oppression could not check. This city is a fair type of Georgia, whose cities and towns have steadily grown, some of them showing a surprising ratio of increase. Even little villages have a neater, more substantial appearance, and beautiful country dwellings are more numerous than ever before in the history of our State. Our manufacturing interests have made steady and active progress, and within the last year the number of cotton factories has increased at an unprecedented rate. Old and long established lines of railroad have increased their mileage and new ones have been constructed, so that most of our farmers of to-day are within easy distance of the road over which the products of their farms can be transported. Electric cars give rapid transit from suburban homes to the hearts of our cities, and telephones of both short and long distance supplement the telegraph in affording instantaneous communication for business or pleasure. Agriculture has been greatly improved; up-to-date methods have been adopted; two blades of grass have been made to grow where one did a few years ago..

Just after the war the high price of cotton led the planters of Georgia to devote all their energies to the production of the fleecy staple, and then by its subsequent rapid decline brought disappointment and

threatened ruin. Taking the alarm the farmers began more and more to raise their own supplies. Thus they are making the farm what it should be, a little world of its own, whose master living independently on the heavy interest paid into his coffers by his well-tilled soil, can become a prince among men, and not, what a borrower must ever be, a servant to the lender. The improvement in the planting interest of Georgia is largely due to the Agricultural Department, established in 1874. Dr. Thomas P. Janes, its first commissioner, made this department a mighty agency for good. The noble work was continued by his able successor, John F. Henderson and his zealous assistant, R. J. Redding (now director of the Georgia Experiment Station and president of the Georgia Dairyman's Association); next by Commissioner R. T. Nesbitt, a faithful and diligent promoter of the people's welfare; and is now being carried forward by the present incumbent, Commissioner O. B. Stevens, and his assistant, Mr. Robert F. Wright, who are determined not to be excelled by their illustrious predecessors. One of the chief objects of this department is the inspection and analysis of fertilizers and oils, the profit of which, over and above all expenses, is about \$30,000 annually, set apart for the benefit of the school fund. Thus this department instead of being an expense is a source of revenue to the State, though it was not originally so intended, and ought not so to be, for every dollar collected could be spent much more to the advantage of the State by being used for the legitimate purposes of this important branch of the government. Other objects are the encouragement of agriculture in all its branches, the promotion of dairying and creameries, the raising of the best breeds of cattle for the farm and the market, and the eradication of that pest commonly known as the cow-tick (*boophilus bovis*). The department has succeeded in lowering the line of quarantine against the tick so as to exempt some of the North Georgia counties from its operation as to them, and is earnestly seeking the co-operation of the people in completely rooting out this plague, so injurious to the cattle interests of the State.

One of the great benefits of this department to the planters was seen in the fall of 1899. When the great statistician Neil predicted a cotton crop of twelve and a half million bales, and consequently low prices, word went forth from the Agricultural Department that it was advisable for all farmers who could do so, to hold their cotton, as there would probably be only nine and a half millions of bales with a probable rise in the price. The advice was justified by the result.

The State Chemist, John M. McCandless, and his assistants, R. G. Williams and J. Q. Burton, in addition to the other important labors of

their department, are doing faithful and efficient work in protecting the farmers against spurious fertilizers and dangerous oils.

The State Entomologist, W. M. Scott, has won the favor of the fruit growers of Georgia by his zealous labors in their behalf, and, especially, by his unceasing efforts for the extirpation of all the pests that attack the orchards.

The Geological Bureau under the management of the State Geologist, W. S. Yeates, and his assistants, S. W. McCallie and Dr. T. L. Watson, is doing a great work for Georgia, by promoting the development of its minerals, metals, building stones, clays and artesian wells.

In everything that should characterize an enlightened Christian State Georgia stands among the foremost in our Union. Leaving behind the past she is pressing forward to a future of increased prosperity and greatness. One strong evidence of growth in a State is increase in population. By the census of 1890 the population of Georgia was 1,837,353. By that of 1900 it is 2,216,331. This is an increase of 378,978, or within a very small fraction of 21 per cent.

CHAPTER II.

GENERAL DESCRIPTIVE SKETCH.

Georgia, the greatest in area of any State east of the Mississippi river, embraces 59,475 square miles, being larger by 1,274 square miles than England and Wales combined, and nearly equal in size to all New England. On its northern border are North Carolina and Tennessee, on the northeastern side South Carolina, on the east the Atlantic Ocean, on the south Florida, and on the west Alabama. Containing in its greatest length from north to south 320 miles, and nearly four and one half degrees of latitude, it has great variety of soil, climate and productions. Its northern portions are diversified by mountain, hill and vale, and drained by numerous rivers, some of which are navigable. The sides of the hills and mountains are covered with the various hard woods, interspersed with pine, a lighter wood, which furnishes an excellent resinous kindling for fires. The soil of this mountain region varies from dark to a red or mulatto color, and is very productive. The valleys and river bottoms are covered in their proper seasons with abundant crops of wheat, corn and other cereals, and are dotted with substantial farmhouses located near some bubbling spring of pure, cold water, from which runs a rippling streamlet through the farm, affording to the stock abundance of healthful drink at all seasons of the year. In some portions of this section cotton is successfully raised, and occasionally thriving fields of tobacco may be seen.

The surface of Northeast Georgia varies from 1,000 to 5,000 feet above the level of the sea. This section is traversed by that part of the Appalachian chain known as the Blue Ridge, with an altitude above sea level of from 3,000 to 5,000 feet. This range runs about one third the distance across the State, and terminates abruptly. Northwest Georgia, the Limestone Region, with an altitude ranging from 600 or 700 to 2,500 feet, covers the greater part of ten counties, with an extent of 3,600 square miles. Of Northern Georgia about 6,000 square miles are above the altitude of 1,000 feet.

About twenty miles west of the Blue Ridge lies the Cohutta Range, a continuation of the Unaka of Tennessee, having an altitude of 3,000 feet, with an abrupt escarpment toward the valley of the Oostanaula on

the west, and continuing into Alabama in a low elevation known as Du-rover Mountain. To the northwest come Lookout and Sand Mountain ranges, which, with their table-lands, belong to the Alleghany system. The highest point of Lookout, known as High Point, has an elevation of 2,408 feet. A northeastern spur of Lookout is known as Pigeon Mountain, with an elevation of from 1,800 to 2,000 feet above the sea, but with one point rising to 2,331 feet. Along the top of this mountain runs the boundary line between Walker and Dade counties. Round Mountain, also a spur of Lookout, has an elevation of over 2,200 feet. From this point rises Rock Creek, flowing longitudinally along the surface of the mountain adjacent to a beautiful waterfall known as Lula, all of which, with Lula Lake, make one of the most picturesque scenes in Georgia. Taylor's Ridge with its extension, the White Oak Mountains, traversing parts of Catoosa, Whitfield and Chattooga counties, rises to 1,300 and 1,500 feet above the sea, Rocky Face Ridge, rising to an elevation of from 1,500 to 1,700 feet, crosses the western part of Whitfield county, forming the eastern watershed of East Chickamauga creek, which flows through the valley at an elevation of 900 feet above the sea.

Among the interesting features of Northwest Georgia are numerous caves. One of the largest, of great extent, with far-reaching galleries, is Hardin's cave, about three miles southeast of Kingston. Some of the chambers are twenty to twenty-five feet high, and, owing to the sloping roof, the cave appears even higher. At Crawfish Springs, near Chickamauga, a stream sufficiently large to be used as a water-power, issues from an underground cavern, and has been converted into a beautiful lake and waterfall. Many other caverns, some extensive, occur at the bases of Lookout, Pigeon and Sand Mountains.. Near the beautiful little town of Cave Spring extensive caverns are found in the limestone formations.

The mountain section of Georgia is noted for its charming valleys. Cedar, Texas, Broomtown and Vann's valleys, are among the most noted in Northwest Georgia, while the fame of Nacoochee, in the northeast section among the mountains of White county, has been proclaimed in song and story. Nacoochee, or the "Evening Star," so the story goes, was the beautiful daughter of a noted Cherokee chief. She was wooed and won by Sautee, a brave young warrior of the Choctaw nation, a people who were the bitter foes of the Cherokees. One dark night Nacoochee eloped with her lover. The enraged father, at the head of a hundred warriors, after days and nights of ceaseless search, found the lovers in their hiding-place among the rocky fastnesses of Mount Yonah. Sautee

was condemned by the old chief to be thrown from the highest precipice of the mountain, and the sentence was put into immediate execution; but to her father's horror the maiden leaping over the precipice shared her lover's fate. Nacoochee and Sautee were buried on the banks of the Chattahoochee in one grave, and a mound raised over them to mark the spot. Two adjoining valleys now bear the names of the young Cherokee girl and her Choctaw lover. In Habersham county are found the falls of Toccoa and in Rabun county the grand chasms and cataracts of Tallulah, famed far beyond the limits of Georgia. Toccoa creek falls 185 feet perpendicularly over a ledge of sandstone. Of the beauty of this silvery cascade descending so gently from the lofty rock, whose sides are plainly seen behind the watery veil, no pen can give an adequate description. Toccoa the Beautiful! Never was name more worthily bestowed. The Tallulah river is the western branch of the Tugaloo, one of the sources of the Savannah. Ten miles above the junction of the Tallulah with the Chattooga, the Falls of Tallulah, by four perpendicular pitches of water of from fifty to eighty feet and a great many smaller cataracts, plunge downward into a grand chasm 860 feet deep. The four principal falls are *L' eau d'or*, *Tempesta*, *Hurricane* and *Oceana*.

All Northern Georgia abounds in useful minerals. Coal is found in the extreme northwest in Dade and Walker counties, the various iron ores in Dade, Walker, Chattooga, Floyd and Polk. In the State some lead, silver and copper are found, the latter being an extension of the celebrated Ducktown region of Tennessee, varieties of it being found in the counties of Union, Towns, Cherokee, Paulding, Haralson, Carroll, Murray, Fulton, Lincoln and Greene. Ochre and sulphate of baryta exist in large beds. Other minerals that have been successfully mined are pyrites, mica, talc, slate, tripoli, limestone and infusorial earth.

Dahlonega, in Lumpkin county, is the center of gold operations in Georgia, the richest veins being in Lumpkin and White. Other counties in which gold is found are Rabun, Towns, Habersham, Hall, Union, Gwinnett, Forsyth, Dawson, Milton, Cherokee, Bartow, Paulding, Douglas, Carroll, Haralson, Gilmer, Fannin, Lincoln, and McDuffie. It is found in small quantities in Fulton.

The bauxite deposits are the largest in the United States. This is the basis of aluminum. Deposits of commercial value have been found in Walker, Chattooga, Bartow and Floyd.

Corundum is found in Georgia in all its varieties except emery. Slate is successfully quarried at Rockmart by the Georgia Slate Company. The manganese deposits are very rich. Sandstones of a variety of colors

and adapted to a variety of purposes are found in Northwest Georgia. In the northern counties asbestos is also found.

Georgia to-day stands second only to Vermont as a marble State, being noted throughout the United States for the excellent quality of her marble.

In 1893 the value of the output was in round numbers \$273,000, and almost the entire product was at that time supplied by the Georgia Marble Company, whose headquarters and quarries were near Tate, in Pickens county. The quarries here opened are named respectively, Creole No. 1, Creole No. 2, Cherokee, Etowah and Kennesaw. The Piedmont quarry, also in Pickens county, is very extensive. The increase from all these quarries had, in 1894, brought the entire product up to 481,529 cubic feet, valued at \$716,359, an increase in one year of over 174 per cent. The structure of the marble from the different quarries is essentially the same, the only marked difference being in color. Some of it is white, some bluish-gray with dark-blue spots, some with dark-blue mottlings, useful for monumental work and interior decorations, others with a variety of shades, such as pink, salmon, rose and dark green, producing rich effects, specially adapted for wainscoting, panels, counters, table-tops, etc. The deposits are larger than any other in the United States. The companies operating the quarries are prepared to saw and finish the stone, and this is done by them and also by other large companies established for this work at Nelson, Canton, and near Marietta. Thus almost the entire product of the Georgia quarries is put upon the market in a finished condition. Marble is quarried also in Cherokee, Whitfield and Polk. Beautiful marble is found also in Floyd.

Fifteen years ago Georgia marble was little known beyond the limits of the State. Now it is the most famous in America, and is recognized as the best for building purposes. The demand for it extends throughout the United States, and shipments have been made to Hawaii. From the Southern Marble Company at Marble Hill was shipped the largest block of marble ever quarried in the United State, to go into the capitol of Minnesota. In the construction of Mississippi's new capitol Georgia marble is one of the main materials, as it is also in the new capitol of Rhode Island.

Granite of the best grade abounds in Georgia. The largest known deposit of this useful stone in the world is found in DeKalb county, fourteen miles east of the city of Atlanta. In the midst of a vast bed of stone extending in all directions, from a comparatively level country there rises to the height of 1,686 feet a solid mountain of granite, with-

out soil except in a few scattered places, where a little verdure appears. This "geological monstrosity," as Dr. Alexander Means, an eminent scientist of the State in his day, styled it, is known by the appropriate name of Stone Mountain. It is seven miles in circumference at the base, and by the ordinary ascent one mile from base to apex. The stone of this mountain and of the wide extended bed of granite that spreads out from its base is uniform in character, admirably adapted for paving as well as for building and monumental work, and is being used for these purposes not only in the cities of Georgia, but also in those of the East and West. There are many other extensive deposits through the State, notably those in Coweta, Elbert, Oglethorpe, Walton, Hancock, Spalding, Fayette and Carroll counties. In 1880 the entire granite product of the State for paving material was valued at \$13,000, and the entire industry employed only thirteen hands. In 1896 the product in paving material alone was worth more than \$750,000, and gave employment to one thousand hands.

Gneiss is quarried extensively in Carroll, Coweta, Meriwether and Heard counties. Red sandstone is quarried near Graysville, in Catoosa county.

The granite beds are found in what is known as Middle Georgia. This is the most thickly settled section of the State. The line dividing it from South Georgia may be considered as running directly across the State from Augusta to Columbus and passing at the head of navigation near Milledgeville and Macon. Much of the land is exceedingly fertile, producing abundant crops of cotton and of corn, or any of the grains that can be raised in any part of the United States. The various grasses, too, afford abundant pasturage for horses and cattle. The creek and river bottoms are exceedingly fertile, but, as they are liable to overflow, these lands are generally devoted to corn, an exceedingly profitable crop in such localities, even though subject to occasional damage by floods.

Even the so-called worn-out lands have, by judicious fertilizing, been brought to a high state of productiveness. This region varies in altitude from 180 to 500 and in some instances to 1,000 feet. There are few elevations that are designated as mountains, and lands too steep for the plow are seldom found over the greater part of this area. Pine Mountain in Harris and Graves Mountain in Lincoln rise a few hundred feet above the surrounding country. Atlanta stands upon the crest of Chattahoochee Ridge at an altitude of 1,050 feet above the level of the sea. Kennesaw Mountain in Cobb, with an altitude of 1,809 feet, and Stone Mountain in DeKalb, 1,686 feet above the sea, tower conspicuously over the surrounding landscape.

Southern Georgia, covering more than half of the State, extending from the southern limit of Middle Georgia to Florida and the Atlantic coast, ranges in altitude between 100 and 500 feet. About 3,000 square miles of the coastal region have an elevation of 100 feet or less above tide. The productions of Southern Georgia are very much the same as those of Middle Georgia. Throughout both these sections fruits of many varieties abound. Pears grow well in every part of the State, but best in Northern and Middle Georgia. The apple succeeds well in every portion of the State where the elevation is four or five hundred feet, with a clay soil or subsoil.

It is in Georgia that the most luscious peaches are produced, those having the richest flavor, the best varieties being found in Middle Georgia and the elevated plateaus of the southwestern portion of the State. In the same sections figs and pomegranates grow admirably, needing no protection in winter except in the upper part of the middle belt. Grapes grow well in every section, and there are some fine vineyards. It may be remarked here that, while the founders of Georgia forbade the importation of the stronger liquors, they did intend to make the colony a wine-producing country. Olives succeed well on the coast. The pecan and English walnut do well. Watermelons and cantaloupes are celebrated for their quality. In fact, the Georgia watermelon has a national reputation. In Thomas county, in the extreme southwestern section of the State bordering on Florida, and with but one county (Decatur) between it and the Alabama line, in addition to all the agricultural productions of the temperate and semi-tropical zones, the apple, pear, peach, plum, pomegranate, fig, quince, cherry, grape, raspberry, blackberry, strawberry, mulberry, orange, lemon and banana may be seen, all growing in the same orchard. In Camden county, in the extreme southeast, oranges flourish, and in the streets of St. Mary's the trees may be seen laden in their season with golden fruit. Berries of all kinds flourish in every section of Georgia. Groundpeas and chufas abound, the former being extensively raised for home consumption and the markets of Georgia and other States. Sugar-cane and sorghum are also crops of great value.

No area of similar extent in the United States shows greater variety than Georgia, and no State east of the Rocky Mountains as great. In its southern part tropical fruits and flowers grow and mature, while on the high peaks of some of its mountains grow plants indigenous to the far north. Many people suppose that latitude determines climate. But other factors which also largely control must be taken into the count. Of these factors rainfall, elevation and air currents exert probably the

greatest influence. Of nine climate belts in the United States, eight are represented in Georgia. Of these eight belts the lowest in mean annual temperature is below 40 degrees, the highest between 70 and 75. Thus Georgia's four and one-half degrees of latitude show a variety of climate equivalent to the average range of 15 degrees, according to the usual estimate, which assigns two degrees difference in the thermometer for one degree of latitude, and one degree of the thermometer to three hundred feet of elevation. The climate of below forty degrees is found on some of the mountain peaks known as "bald" above the range of trees, where only shrubs appear, and on whose summit arctic insects are found. Of course there is but a small part of this belt in Georgia.

TABLE I.

MEAN ANNUAL TEMPERATURE.

On the sides of these mountains below the summit is a mean annual temperature of between forty and forty-five degrees, corresponding with upper New England and New York and the mountain region of Virginia. A larger climate zone between forty-five and fifty degrees corresponds with portions of New York, Pennsylvania and Ohio. The zone between fifty-five and sixty degrees embraces a narrow strip running through North Carolina and Virginia up to New Jersey. The zone between sixty and sixty-five degrees contains an area two or three times as large as all the preceding zones together, and passing through both Carolinas and into Virginia. The zone between sixty-five and seventy degrees embraces nearly all of Middle Georgia, upper Alabama, Mississippi, Louisiana, Texas, West Tennessee and Arkansas, and extends into Virginia. The mean annual temperature at some of the important stations in this area are: Leo, 60.1; Rome, 61.9; Gainesville, 61.3; Atlanta, 61.4; Carrollton, 62; Oxford, 62.6; Athens, 63; Augusta, 64; LaGrange, 64.1; Thomson, 64.7. The climate of Southern Georgia corresponds with that of lower Texas, Louisiana, Mississippi and upper Florida, being chiefly in the zone between sixty-five and seventy degrees of mean annual temperature, this zone embracing the following stations: Macon, 66.1; Swainsboro, 67; Cuthbert, 68.1; Americus, 68.2; Walthourville, 67.6; Brunswick, 68.7. Blackshear, 70.2, is the only station touching the zone between seventy and seventy-five degrees. The climate of Atlanta corresponds with that of Washington, St. Louis and Louisville, the winters being warmer and the summers cooler.

For the whole State the July mean temperature is 81.8. The isothermal line of eighty degrees, July temperature, runs above Augusta and Macon to West Point. Above this line, embracing nearly all of North

and Middle Georgia, the July temperature is between seventy-five and eighty degrees. Below this line, embracing nearly all Southwest, East and Southeast Georgia, the July temperature is between eighty and eighty-five degrees.

The only climatic belt in the United States not found in Georgia is that in the extreme south of Florida, with a mean *annual* temperature of between seventy-five and eighty degrees.

Georgia's summers are, on an average, cooler than those of more northerly sections, while the winters, though seldom severe, are cold enough to dissipate the germs of disease.

The annual average rainfall of Georgia is 49.3 inches, the highest being at Rabun Gap, 71.7 inches, the lowest at Swainsboro, 39.4 inches. The average for different sections of the State is: for Middle Georgia, 49.7 inches; Northwest Georgia, 60.3 inches; East Georgia, 41.4 inches. The summer rainfall for the State in inches averages 13.4; North Georgia, 13.6; Southwest Georgia, 14.5. Of summer rainfalls the averages in inches are: Brunswick, 16.6; Americus, 16; Rabun Gap, 15.4; Atlanta, 10.8; Rome, 10.2. Atlanta's annual rainfall is 52.12 inches.

The average elevation above the sea of North Georgia is 1,700 feet; of Middle Georgia, 750; of Southwest Georgia, 400; of East Georgia, 125; of Southeast Georgia, 100, giving an average for the State of 615 feet. Here is a difference between the extreme averages of 1,600 feet.

Snow seldom falls in Southern Georgia, and then rarely to a depth of more than two inches, disappearing entirely in one or two days. There are a few notable exceptions at intervals of several years near the line of Middle Georgia, when it falls to a greater depth, and is followed by a severe freeze and has been known to stay on the ground for several days. In Middle Georgia the fall of snow is slightly more frequent, while its frequency and depth is greatly increased in the mountain region.

The climatic conditions in Georgia are favorable to man and beast. There is no more salubrious climate than that of North Georgia. It compares favorably with that of many sections famed throughout the Union as summer resorts. In North and Middle Georgia summer and autumn are the most delightful seasons of the year. Cool breezes generally temper the sun's rays in the heat of a summer day, and the nights, especially near the mountains, are cool, refreshing, and invigorating. Nothing is more restful to the weary laborer, whether he be a mechanic or a toiler in the fields of thought, than to lie down to slumber unoppressed by the sultriness of a summer night. An evening cooled by gentle zephyrs is a luxury, and such it is one's privilege to enjoy amid the mountains of the northern section or the more elevated portions of

Middle Georgia. Even in Southwest Georgia there are plateaus and ridges with an elevation of from 300 to 500 feet above sea level, where summer nights are refreshing and invigorating. Even in the lowlands of the coastal region and the interior portions also, the heat is greatly modified by the sea breezes which, coming from the Gulf and the Atlantic, cool the summer evenings and nights.

In calculating the healthfulness of the State, the ratio of mortality of the colored population ought to be excluded, since their mode of life, especially in the cities, is far from conducive to health, and their death-rate is far in excess of that of the whites.

The following table shows the average number of deaths in every 1,000 of the population for the year 1890 in the States of Georgia, California, Illinois, New York and Massachusetts:

NUMBER OF DEATHS PER 1,000.

STATES	White	Colored	Total Average Including both Races
Georgia	10.98	15.50	13.24
California	13.42	14.34	13.88
Illinois	13.99	18.43	16.21
New York	17.03	16.25	16.64
Massachusetts	19.48	23.57	21.52

Hence it may be seen that Georgia's climate as compared with the eastern, middle, western middle and extreme western is pleasant and healthful.

The Coastal Region of Georgia abounds in large, deep and navigable rivers, sounds and inlets, offering every facility for commerce and trade, to which advantages should be added the splendid lines of railway that connect the seaports, Savannah and Brunswick, with the highly productive regions of the south, southwest and west. Savannah, though a city of only 54,000 inhabitants, is seventh in the Union in the total value of its exports, is the third cotton port in America and ranks first in the world in lumber and naval stores.

When John Verrazzani, in the service of the king of France, visited the Georgia coast in 1525, he was so charmed with its rivers that he named them after the most noted streams of France. He called the St. Mary's the Seine; the Satilla, the Somne; the Altamaha, the Loire; the Savannah, the Grande; St. Catherine's inlet, the Garonne; Ossabaw Sound, the Gironde.

The islands that skirt the Georgia coast produce the famous sea-island cotton. They, as well as the mainlands opposite, furnish great quantities

of rice, in the production of which Georgia comes after Louisiana and South Carolina. Some of the largest plantations of this grain, which furnishes such wholesome food to thousands of people, are situated on the banks of the Ogeechee. The lumber business of Southern Georgia, especially of the southeastern section, is of great proportions and has added much to the prosperity of the wire-grass section, if it has not been the greatest factor in its recent rapid development. It has built thriving towns and opened up new fields for commerce, increasing greatly the value of the exports of Savannah and Brunswick, and giving to Darien and St. Mary's their most valuable articles of trade.

Of all the forest trees of the State the long-leaf pine of Southern Georgia, well known as the Georgia pine, holds at the present time the chief place. It is the same as the *Pinus palustris* or *australis*, which is to be found all along the Atlantic and Gulf coasts to a distance of 150 miles back from the sea, from the Potomac to the mouth of the Mississippi. No tree in the temperate zone, and perhaps not in the whole world, serves better the wants of mankind. From its roots to its slender, needle-like leaves, every atom can be utilized. It has a long, slender trunk, often rising to the height of seventy or a hundred feet without a curve or a branch until near the top, where there appears a cluster of branches bearing bunches of needles, long and evergreen, which decay and drop out annually, one after another, and yet never enough at any time to deprive the tree of its richly colored foliage. These pines form a continuous forest for a distance of 1,000 miles, unaffected by frost or heat, growing densely on sandy soil or in the swamps. The ground under them, where it is not swampy, is covered with a carpet of decayed needles of a reddish-brown color, slippery and elastic under the tread. The pine mast or seed is a great food for hogs. The aromatic odor of the pines is very helpful to asthmatic and consumptive patients. The timber which is cut from it is equally good for building, for cabinet work and furniture, is susceptible of high polish, can be furnished in almost any size and length, and can stand exposure to the weather. Some of it has a curly grain, which, when polished, makes furniture beautiful and greatly prized. The roots and bark have medicinal and chemical properties that have for years been utilized. From them the best of lamp-black is made. From the bark comes the highest grades of charcoal. The sawdust furnishes a heavy percentage of alcohol and creosote. The sap, as it oozes from the tree, supplies a gum from which, when thrown into a cauldron, boiled and distilled, there is obtained spirits of turpentine, while the residue in the cauldron is resin, sometimes called rosin. This resin is divided into different grades, the finest of which consists

of amber-colored crystals, known as window-glass resin, used on violin bows, for the manufacture of stained glass, and fine painters' materials. North Carolina has long been famed for the production of tar, pitch, turpentine and naval stores; but of late years Georgia has forged ahead of her in these valuable articles of commerce. The short-leaf pine abounds in Middle Georgia and the white pines in Northwest Georgia. In Southeast Georgia is also found the live-oak, a valuable wood for ship-building.

Another valuable wood, the cypress (*Taxodium distichum*), grows along the margins of streams or in swamps with the sweet-gums and black gums. It is found in the country traversed by the Central Railroad from Augusta and Macon toward Savannah, along the Southern Railway from Macon southward and eastward, and in much of the intervening country. This tree attains its largest dimensions in swamps near the coast. Capable of standing exposure well, it shrinks and swells but little when subject to alternations of temperature or of moisture and dryness. These characteristics make its timber especially suitable for shingles, doors, sashes and exterior trimming.

In Middle and Northern Georgia there is an abundant supply of hardwood lumber for manufacturing railroad cars, wagons and agricultural implements, besides a great variety suitable for manufacturing furniture. Among these are oak, hickory, ash, walnut, cherry and maple. In North Georgia there is found also the sugar-maple, the wood of which is light brown and hard. From its sap can be made excellent sugar and syrup.

The pine timber land, which a few years ago could be bought for from 50 cents to \$1.50 an acre, now brings from \$4.00 to \$8.00. Of course the wealth brought into Georgia by the immense pine forests through the trade in lumber and naval stores is of great present benefit to our State. But will not the day come, when through the turpentine ax and the saw these noble pines will disappear and be a thing of the past? Most assuredly yes! What then will be the fate of this section of Georgia? The lands from which the forests have been cleared will be opened up for farms and the staple crops, fruits and vegetables from the cultivated fields and carefully tended truck gardens will find their way to the markets of the North, in which there is a rapidly increased demand for the products of our Georgia farms and gardens. Best of all they will pass through our own ports, bringing into them a continuation of the profits now derived from the shipments of lumber and naval stores. In addition to this the grasses will supply a natural pasturage which, together with the fact that no shelter would be needed

in winter, will make this the choice section of the State for extensive sheep farms.

Not even in Louisiana does the sugar-cane grow more luxuriantly, or yield a greater amount of saccharine juice than throughout this same sand piney belt. In Thomas county vineyards have been, and are very successful, and the best of wines have been made. Experiments at Waycross, in Ware county, show that the soils of that region are admirably adapted to the culture of fruits, figs and grapes. Watermelons can be grown in any quantity and size. In the extreme southern tier of counties oranges and bananas can be produced, and with the same care should be made to do as well as in the neighboring counties of Florida.

Dr. Thomas P. Janes, in his handbook published in 1876, says: "I have seen no section of Georgia in which the people seem to secure a comfortable supply of food with less effort, and can see no reason why the whole country may not be made equal, if not superior, to that section of Prussia, where Frederick the Great founded the city of Berlin. There is the greatest similarity in the soil and topography of the two sections, and should the tide of German immigration be turned hither, there would soon be realized to them the comforts and pleasures of the Fatherland." From the Okefinokee Swamp, in the extreme southeast section, thousands of tons of muck can be obtained which, with the aid of the Satilla river marls, will convert the sandy and red clay lands in its neighborhood into the most productive market-gardens. According to an act passed by the legislature October 29, 1889, and approved by the Governor, John B. Gordon, the Okefinokee Swamp was sold to certain gentlemen incorporated as the Suwannee Canal Company, of which Henry Jackson, of Atlanta, was elected president and A. E. Thornton, vice-president of the Atlanta National Bank, was made vice-president. Explorations made by the company have shown the swamp to be about forty-five miles long, with an average width of about thirty miles. In it are numerous islands covered with long-leaf yellow pine along the central ridges, while on their hammock lands are found the red bay, white bay, magnolia and white holly, known as Henderson wood. This last named tree, when dry, is white like ivory, with a grain not perceptible, and from it excellent piano keys are made. The red bay takes a beautiful polish not much inferior to that of mahogany. The timber bays or cypress brakes running north and south through the swamp, supply the very best quality of black cypress, which will cut from 25,000 to 100,000 feet to the acre. One of the islands, called Billy's Island, was once the home of the Seminole chief, Billy Bowlegs. Okefinokee Swamp abounds in fish and game of all kinds. On some of the islands are found

deer, bears, turkeys, woodcocks, partridges and snipe. Here also dwell the otter, wild cat and panther. The waters of the swamp abound in bream, perch and the large-mouthed black bass, the last being sometimes called trout, which the fishermen, after the primitive Indian fashion, obtain by shooting them with bow and arrow. The cypress brakes are separated from each other by what are called prairies, though covered with water to the depth of two or three feet, which innumerable water lilies cause to resemble a field white with cotton. The water being drained off leaves a muck eight feet deep, the great utility of which as a fertilizer has already been mentioned.

The Georgia sugar-cane crop deserves special mention as one of our most important wealth-producing factors. The striped or ribbon cane, which is now so successfully grown in the southern section of our State was in 1825 introduced from Savannah, Georgia, into Louisiana, which State is now famous for its molasses and sugar industries. Throughout Southern and Middle Georgia this is one of the best crops, and in some localities is raised with profit even as high north as Whitfield county, in the mountain regions. Mr. W. L. Peek of Conyers, a little north of the central part of Middle Georgia, wrote to the Agricultural Department in 1899 that he had made during that season 600 gallons of syrup to the acre, while a letter from Rev. Luke Johnson of Dalton, Whitfield county, reported 300 gallons to the acre from cane raised by him. But in the southern counties are obtained the best results, and Cairo, in Thomas county and Quitman, in Brooks, are perhaps the greatest shipping points for Georgia cane syrup, the rival in our southern markets of the best New Orleans brands and of the famed maple-syrup of the North.

Sorghum syrup, produced from what is called Chinese sugar-cane, is also a great favorite with many of our planters, especially for their negro laborers, by whom it is preferred to almost any other kind.

As a wheat-growing State Georgia is making a record of which her people may well be proud. Mr. J. M. McCandless, State Chemist, after a careful analysis of nineteen Georgia samples, has shown that Georgia farmers can raise as fine wheat as is grown anywhere. The attention that is being given to all the small grain crops is an encouraging sign of the progress being made in diversified farming.

But the greatest wealth-producing factor in Georgia when the farmers first raise their own supplies, and make it their surplus crop, is King Cotton, the fleecy staple, which all the world wants and must have. In 1897-98 and again in 1898-99, Georgia produced 1,500,000 bales, an over-production, and to do this neglected to give to other crops their

proper attention. The price of cotton, which, steadily decreasing for the past two decades, had reached the low figures of four and one-half cents a pound, compelled them now to a change of policy, which had long been urged by the press of the State, notably the *Macon Telegraph*, the *Atlanta dailies*, the *Constitution and Journal*, the *Augusta Chronicle*, the *Savannah Morning News*, the *Columbus Enquirer*, and many other papers of Georgia, and to the adoption of which the Agricultural Department had bent its every effort. Raising first the food crop, they planted cotton in a less, and yet sufficiently large quantity, and the resulting high prices brought renewed hope and prosperity to all classes of our people.

Here it may be not inappropriate to say that the traveler from the North and West passing through the State should not judge Georgia from the ordinary farm scene, viewed from the window of a moving train.

Our railroads generally run along the ridges where the land is poorest, the best lands being away from the great highways of travel. The negro laborer, generally a prominent figure in the scene, is a thriftless sort of farmer who knows only how to plow and hoe, but who, under the intelligent eye of the white man, makes the best of laborers.

A sight of some of the farms where improved methods have been practiced shows conclusively that there is no better country in which to seek for homes, where not merely a comfortable living amid pleasant surroundings can be had, but where, under the skillful hand of the white man, competency and wealth may be acquired.

The water-powers of Georgia are immense, and are estimated at 550,000 horse-power, of which less than 50,000 have been utilized.

The school and church privileges of Georgia are treated in full in the chapters on "Education" and "Religious Denominations."

In the State of Georgia there were in 1890 440,459 sheep with a wool clip of 841,141 pounds; 873,926 cattle, of which 49,108 were working oxen and 287,717 were milch cows. Of the cows 3,931 were pure bred and 28,148 were graded as one half blood or higher. There were produced 53,234,508 gallons of milk, 14,483,323 pounds of butter and 12,833 pounds of cheese.

There were also 103,501 horses, 156,860 mules, 517 donkeys, 1,396,362 swine, 7,357,934 chickens, 148,797 turkeys, 291,676 geese, and 105,537 ducks. There was a production of 11,522,788 dozens of eggs, and 1,757,758 pounds of honey.

The annual report of the Bureau of Animal Industry for 1899, published by the United States Department of Agriculture, gives the number

of sheep in Georgia as 294,826, valued at \$518,893, yielding 1,218,612 pounds of wool, washed and unwashed, and 731,167 pounds of scoured wool. The Year Book published by the same department for 1900 places the number of sheep in Georgia at 271,534, yielding 1,086,136 pounds of wool, washed and unwashed, and 651,682 pounds of scoured wool. This indicates a steady decrease in the sheep and wool industry of Georgia. Are our farmers going to let this state of affairs continue, and allow an industry which, under proper conditions, would be a great source of wealth to our State to go to ruin for the lack of such laws as will give the sheep proper protection?

CHAPTER III.

ECONOMIC GEOLOGY AND MINERALOGY.

In the steady growth of industrial development that is taking place along various lines in Georgia, the mineral resources of the State are not being neglected, and the subject of economic geology and mineralogy is claiming each year a larger share of attention. Through the active and systematic work, both of private individuals and of the State Geological Department, thoughtful men are realizing more and more that this phase of the State's material development is only in its childhood, and that a most promising field here awaits the trained worker and the capitalist.

A brief outline is here given of the general geologic features of the State, together with a short account of some of the most valuable mineral deposits, building-stones, water-powers, etc.

By reference to the accompanying map it will be seen that the State is divided geologically into three main divisions: 1st. The Paleozoic area in the northwest, embracing the counties of Dade, Walker, Catoosa, Whitfield, Chattooga, Floyd and the greater parts of Murray, Gordon, Bartow and Polk; 2d. The Crystalline area, including all that portion of the State north of a line through Columbus, Macon, Milledgeville and Augusta and not embraced in the Paleozoic area; 3d. The Coastal Plain area, beginning at the line above described and taking in all the southern portion of the State.

In the Paleozoic area Cambrian, Silurian, Devonian and Carboniferous formations are represented. The rocks are principally shales, sand stones, limestones, quartzites and cherts.

The general surface configuration presents a region of parallel valleys and mountain ridges, the bulk of the area forming a portion of the great Appalachian valley.

In this area are valuable deposits of coal and ores of aluminum and manganese. The roofing-slate of the State is found here, and all the iron deposits that have been so far worked are in this area.

The Crystalline area is composed of granites, schists and gneisses, with intruded basic eruptives of later age. The rocks of this area are of

great age, but their exact position in the geological time scale has not yet been definitely decided upon.

The Blue Ridge Mountains, the easternmost of the Southern Appalachians, traverse this region in a northeast southwest direction. From the southern foothills of this range the land surface slopes gradually seaward to its junction with the Coastal Plain. This portion of the area is known as the Piedmont Plain. Atlanta, situated in the upper part of this belt, is 1,050 feet above sea level.

Conspicuous among the minerals of commercial importance in the Crystalline area are gold, corundum and asbestos.

The best building-stones in the State are also in this region and near the contact between it and the Paleozoic.

The Coastal Plain is much younger, geologically, than either of the other two areas and is very different from the adjoining crystalline area, both in the character of the rocks and the surface configuration. The great mass of the strata is of Eocene and Miocene age, overlaid by the Lafayette and Columbia formations. In the northwest corner a considerable area of underlying Cretaceous rocks have been exposed through the removal by erosion of the latter formations. These rocks have their greatest width at the western end of the belt, but according to Dr. Geo. E. Ladd, they can be traced clean across the State into South Carolina.

The rocks of the coastal plain consist of loosely consolidated sands and gravels, with clays, marls and limestones. In passing from the harder formations of the Crystalline area to these much softer rocks, all of the rivers form falls or cascades. The line marking the junction of the coastal plain with the Crystalline area is hence called the "fall line." Up to this line all of the larger streams, flowing through the flat, low lying coastal plain, are navigable. The fall line, forming the head of navigation and affording important water-powers on the streams, determined the location of a number of important towns—Columbus, Macon and Augusta.

In the coastal plain are found the finest clays of the State and valuable beds of marl.

GOLD.

Gold is known to have been found in Georgia in 1829 on Duke's creek in White county, that part of the county where the discovery was made, being at that time a part of Habersham county. It is also claimed that it was found a year prior to this in Lumpkin county. By the year 1830 the "gold fever" had fully developed in Georgia. In 1831 \$212,000 was sent from Georgia to the United States Mint, and in 1838 the United



PLACER MINING AT THE WHITE PATH GOLD MINE, GILMER COUNTY, GA.

State government established a branch mint at Dahlonega, which continued in operation till the civil war in 1861. The greatest output of any one year during these twenty-four years was in 1843, when over a half million dollars were coined.

The State Geological Survey estimates in Bulletin No. 4—A, that the total production of gold in the State, from its earliest discovery till 1896, was \$16,228,730. Statistics from the Director of the mint show a total coining value of \$546,006 for the gold received from Georgia during the four years following 1895.

The gold deposits of Georgia form one of the main belts of the gold fields of the Southern Appalachians. Two auriferous areas, as defined in Bulletin No. 4—A of the State Geological Survey, are to be traced on the southeast side of the Blue Ridge running in a northeast-southwest direction, closely parallel with the main axis of the mountain range. The northernmost and largest of these two belts is the Dahlonega belt. It has a length of about 150 miles with a width varying from one to five miles.

Beginning with Rabun county it runs southwest through Habersham, White, Lumpkin, Dawson, the northwest corner of Forsyth, Cherokee, the northwest corner of Cobb, the southeast corner of Bartow, Paulding and Haralson counties.

The other belt, called the Hall county belt, traverses the counties of Rabun, Habersham, Hall, Gwinnett, Forsyth, Milton, DeKalb and Fulton.

A third belt traverses Cobb, Paulding and Carroll counties.

A fourth belt may be traced through Lincoln, Columbia, McDuffie and Warren counties, in the southeast portion of the Crystalline area.

The Dahlonega belt is the largest and most important of all these belts.

Besides these well-defined areas many irregularly located deposits may be mentioned occurring in Towns, Union, Gilmer, Fannin and Meriwether counties.

Gold is to be found in Georgia under three conditions: 1st. As water-worn pebbles and fine grains in the beds of the streams traversing the auriferous regions.

2d. In veins or leads, the gold-bearing quartz generally occurring in lenticular masses or stringers, designated by Mr. G. F. Becker of the United States Geological Survey, "stringer leads." Small cross fissure veins often occur at right angles to the principal leads, and the wall rocks are frequently impregnated with gold to a considerable distance. Beneath the influence of atmospheric weathering these leads yield the

so-called "refractory" ores, requiring expensive treatment for the production of the gold.

3d. In decomposed wall-rock and included vein material. The decomposition *in situ* of the wall-rock, which is generally a gneiss or schist, varies in depth at different localities, sometimes amounting to as much as a hundred feet. For this rotten material Mr. Becker has proposed the term "saprolite."

The richer placer mines in Georgia have long since been exhausted, though dredging operations are at present being successfully conducted on some of the rivers in the Dahlonega belt.

In Lumpkin county the working of the saprolites constitutes the principal mining operations now being carried on.

The material is washed out of its bed by directing against it a stream of water under high pressure from a hydraulic giant, and is conducted away in flumes or sluice-boxes, the ore and fragment of partially decomposed wall-rock being carried to the stamp mill where it is to be crushed, while the free gold is caught in the riffles with which the flumes are lined and collected with mercury.

Deep mining has been developed as yet to only a limited extent in Georgia. A good example of this kind of mining is to be found in the Creighton, formerly known as the Franklin mine, in Cherokee county. Here the undecomposed sulphides have been taken out for a depth of several hundred feet, by sinking shafts and driving drifts at one hundred-foot levels. The chlorination process is employed in the extraction of the gold. This and the Royal mine, in Haralson county, serve as an index to what may be accomplished in the future with the sulphuret ores.

Activity in mining matters has been very marked in the region of Dahlonega for the past two years, and large sums have been invested.

The following quotations may be taken as a summary in regard to the economical features of gold mining in Georgia:

The first is from a paper on the gold deposits of Georgia, read by Mr. S. W. McCallie, Assistant State Geologist, before the International Gold Mining Convention, held at Denver, Colorado, July 8, 1897.

"The future of the gold mining industry of the State depends, to a great extent, on the economic treatment of low-grade ores which are known to exist in large quantities."

The other is from Prof. W. S. Yeates, State Geologist, who, in the concluding chapter of Bulletin No. 4—A, of the State Survey, on a part of the gold deposits of the State, says: "I do not believe that the Georgia gold mines may be expected to produce bonanzas; and the fortunes to be made in a day will be exceedingly rare; but there is every reason to

believe, that when properly developed and equipped for extensive operations, the gold deposits of Georgia will rank among the best dividend producers of the world."

Among some of the well-known mines in the State may be mentioned the Barlow, Finley and Hand mines in Lumpkin county, the Creighton mine in Cherokee county, the Loud mine and the Yonah Gold mines in White county, and the Royal mine in Haralson county.

SILVER.

Ores of silver in any quantity have never been found in Georgia. As a by-product in the refining of the gold sent by the State to the United States Mint, silver to the coining value of from six to seven hundred dollars is derived annually.

IRON.

The iron ores of Georgia furnish one of the most valuable of the various mineral products of the State.

All the ore so far mined has been taken from the Paleozoic area, though deposits of limonite (brown iron ore) that would warrant being developed are to be found in several localities in the Crystalline area, and magnetite also occurs in this area; but whether in workable quantities or not has not yet been determined.

The ores of the Paleozoic area consist of the brown iron ores or limonite, and the red ores, or hematite.

The brown ores furnish the bulk of the material taken out and are mined at present in Bartow, Polk and Floyd counties.

Mr. S. W. McCallie, Assistant State Geologist, in an article written for the *Engineering and Mining Journal*, has described in outline the occurrence and character of these ores. According to him, the most abundant deposits occur in pockets, or irregular deposits, in residual clays that have resulted from the weathering of an extensive magnesian limestone formation of Lower Silurian age, known as the Knox Dolomite. From a number of analyses he concludes that the ore will yield from forty-eight to fifty per cent. of metallic iron.

Other deposits of less extent occur in Cambrian and Carboniferous formations.

Most of the limonite of this region is not pure limonite but is the hydrous sesquioxide of iron, having a greater or less per cent. of the anhydrous oxide or hematite mixed with it, giving the typical "brown ore" of commerce.

The red iron ore is mined in Walker and Chattooga counties. It is a fossiliferous hematite usually correlated with the Clinton beds of New York. Below the influence of atmospheric weathering the ore carries a considerable percentage of lime.

According to statistics kindly furnished by Dr. David T. Day of the United States Geological Survey, the output of iron ores in Georgia for 1899 was 236,748 long tons, valued at \$235,343.

A few blast furnaces are in operation in the iron-mining region, but the greater part of the ore mined is shipped to other States.

OCHER.

Yellow ocher, an earthy form of hydrated iron oxide, used in the manufacture of paints and pigments, and linoleum, occurs in Bartow county. The ocher of these deposits is of good quality and is favorably known to the trade. The following is an analysis of a sample by Mr. N. P. Pratt:

Hygroscopic moisture .....	.60
Water of combination	9.31
Free silica (sand)	7.10
Silica as silicates	6.51
Alumina	8.86
Iron peroxide	66.82
	<hr/>
	99.20

The production of mineral paints in Georgia in 1899, as shown by figures furnished by Dr. Day, was 3,212 short tons, valued at \$39,505.

Mr. J. J. Calhoun of Cartersville, Ga., informs us that the shipment of yellow ocher from Bartow county from August 1, 1899, to August 1, 1900, was 4,500 tons.

MANGANESE.

The oxide of manganese constitutes another of the more valuable mineral products of the State. Manganese ore of fine quality occurs in Bartow and Floyd counties, where it is extensively mined. There are also deposits of less extent in other counties in the Paleozoic area. Manganese is used for a number of purposes in the industrial arts and sciences, especially in the manufacture of steel and in the preparation of chlorine gas.

The production of manganese in Georgia has fluctuated greatly during different periods. In 1898, as shown by the twentieth annual report of the United States Geological Survey, Georgia led all the States in the production of manganese, the output being 6,689 long tons, valued at \$6.21 per ton. In 1887 the output reached a little over nine thousand tons.

In 1899 the total amount as shown by the figures furnished by Dr. David T. Day, was 3,089 long tons, valued at \$23,377.

BAUXITE.

Extensive deposits of this mineral occur in the Coosa valley of the Paleozoic area. The largest deposits are in Floyd and Bartow counties, but its occurrence is also to be noted in Polk, Walker and Chattooga counties.

Bauxite is a hydrate of the metal aluminum, and is the principal source of the aluminum of commerce. It is also largely used in the manufacture of alum. It occurs in commercial quantities in only three other localities besides Georgia in the United States: in Alabama, where the deposits are a continuation of those in Georgia, in Arkansas and in New Mexico, to a limited extent.

In Georgia the ore occurs in pockets or distinctly defined bodies, and can generally be extracted with pick and shovel without resorting to blasting. The bulk of the ore is very pure and is worth from \$3.50 to \$4.50 per ton at the mines. The production has varied considerably during different years. The production in the United States is at present confined to Georgia and Alabama. In 1897, as shown by the United States Geological Survey Report, the output from the two States was 20,590 long tons, valued at \$57,652. Of this, 7,507 tons were from Georgia.

CORUNDUM.

Corundum occurs in a number of counties in the Crystalline area and may be ranked as one of the important mineral products of Georgia.

Corundum, used in its broadest sense, is a term for all native occurring oxide of aluminum, including the precious stones, ruby and sapphire. In a more restricted sense, it is used for all the non-transparent varieties of dark or dull color.

Emery is a black or grayish-black, granular corundum having some iron oxide, either hematite or magnetite, intimately mixed with it.

Corundum, using the term in its more restricted sense, like bauxite, occurs in commercial quantities in the United States in a limited number of localities. The other States producing it besides Georgia are North Carolina, Pennsylvania, New York and Massachusetts. The Georgia deposits occur in a belt of considerable width running in a parallel direction with the main axis of the Blue Ridge mountains on their southeast side. Some occurrences are to be noted, however, in Towns and Union counties on the other side. The belt runs from Rabun and Towns southwesterly to Carroll and Heard counties. The most important deposits are in the northeast end of the belt in Rabun, Towns, Union and Habersham counties.

According to Mr. Francis P. King, formerly Assistant State Geologist, the deposits occur in veins intersecting basic magnesian rocks of which peridotite may be taken as a type. These basic magnesian rocks form igneous intrusions in the prevailing gneiss and schists that make up the country rock.

In Bulletin No. 2 of the State Geological Survey, page 74, Mr. King says: "A matter of note is the constant presence of hornblende gneiss, either on one side or the other, of these formations. Such being the case, and since these gneissic-hornblende formations, varying from fifty to three hundred feet and more in width, are continuous for miles across the country, they act as an excellent guide in a search for the corundum-bearing formations. Gneiss or mica-schist seems always to surround the peridotites, or "chrysolite formations," as they are commonly called, the hornblende gneiss apparently never coming in close contact with the peridotites."

The largest mine in the State, and one of the noted ones of the United States, is the Laurel Creek Mine in Rabun county near the Carolina line.

Corundum is the hardest of all naturally occurring substances, the diamond excepted, and its extensive use as an abrasive was the natural sequence to its discovery and a knowledge of its physical properties.

PYRITE

Pyrite, the naturally occurring sulphide of iron, is widely distributed in small quantities throughout the northern part of the State, but so far it has not been found in sufficiently concentrated deposits to warrant mining operations, except in a few localities.

Pyrite is extensively used in the manufacture of sulphuric acid, and

where deposits occur not too remote from transportation facilities, they are well worthy of attention.

The best prospects for this mineral seem to be in Lumpkin county.

COPPER.

Copper ores occur in Murray and Fannin counties as a continuation of the Tennessee deposits, and mining operations are carried on to a limited extent in the upper part of these counties.

GRAPHITE.

Graphite occurs in a number of localities in the northern part of the State, but whether in quantities of a quality that would repay systematic development is not known.

Graphitic schists have been mined in considerable quantities near Emerson, Ga., for use in the manufacture of fertilizers.

ASBESTOS.

Asbestos occurs at a number of localities in the Crystalline area. Georgia and California are the only States in the Union in which it is mined, the most of the asbestos used in this country being imported from Canada.

Asbestos finds various uses in the industrial arts where a heat-resisting substance is needed, as in the manufacture of fire-proof safes and other articles liable to be subjected to high temperature. Being a good non-conductor it is also extensively used for wrapping pipes in steam-heating, etc.

The asbestos found in Georgia is a fibrous variety of the common mineral hornblende, and is the true asbestos of mineralogists. The Canada asbestos is a fibrous form of the mineral serpentine called chrysolite.

Figures furnished by Dr. Day show six hundred and fifty short tons to have been mined in Georgia during 1899, valued at \$10,500. The most extensive mine in the State is located at Sall's mountain in White county. Mines have also been opened up in Rabun, Meriwether and other counties.

TALC.

Talc occurs in a number of counties in the northern part of the State, the principal deposits occurring in the contact region of the Paleozoic and Crystalline areas.

Mining operations have been carried on from time to time in Murray, Fannin and Cherokee counties.

Soapstone is a compact massive variety of talc. This mineral is used as a lining in stoves and furnaces and for other similar purposes. Talc ground to a powder is used as a lubricator, and the finer varieties can be used for crayons and various purposes.

MICA.

Mica occurs widely distributed over the Crystalline area, but little has been done as yet towards the development of the mica industry in Georgia, although deposits have been worked in Union and Fannin counties.

The marketable value of mica depends on the size of the cleavage sheets that it will yield and their freedom from flaws and discoloration. The usual occurrence of mica is in pegmatitic dikes or veins, of which it forms one of the constituent minerals along with quartz and feldspar.

BARITE.

Barite, or heavy spar, the sulphate of barium, occurs in the Paleozoic area in Bartow county, where it has been mined for a number of years. Its chief use is in the manufacture of paint as a substitute for white lead.

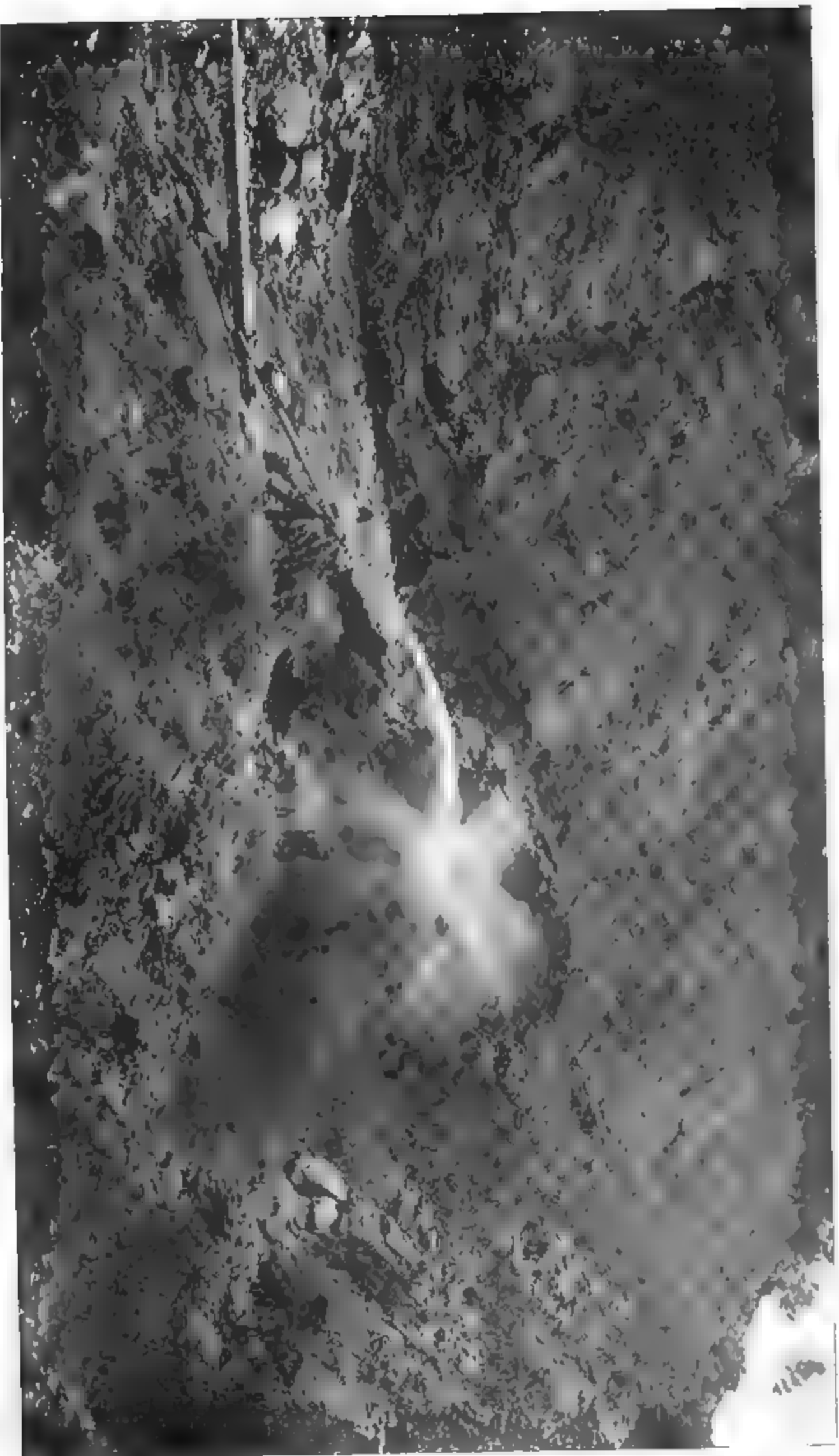
PRECIOUS STONES.

Amethysts of good quality are found in Rabun county. A few diamonds have been found in Hall county. Rubies and sapphires of small size have been obtained in limited numbers in connection with corundum mining, and some green beryl suitable for cutting has been found in the northeast part of the Crystalline area. Some good moonstones have been cut from feldspar from Upson county.

COAL.

The coal fields of Georgia are in Dade and Walker counties in the Paleozoic area and are a part of the Warrior coal field of Alabama. The following figures taken from the twentieth report of the United States Geological Survey, giving the output in short tons from 1890 to 1898 will give an idea of the extent of the industry.

1890	228,337	1895	260,998
1891	171,000	1896	238,546
1892	215,498	1897	195,869
1893	372,740	1898	244,187
1894	354,111		



HYDRAULIC MINING AT THE SINGLETON MINE, LUMPKIN COUNTY.

Statistics furnished by Dr. Day show an output of 233,111 short tons in 1899, valued at \$233,344. A good per cent. of the coal mined in Georgia is converted into coke.

CLAYS.

Throughout that portion of the State north of the fall line (a line from Columbus through Macon to Augusta) clays occur *in situ*, derived from the feldspathic constituents of the country rocks. At numerous localities these clays are suitable for the manufacture of common brick and the coarser grades of earthenware.

Immediately below the fall line and extending in a narrow belt across the State are to be found, in addition to the clays suitable for the purposes mentioned above, extensive deposits of what is technically termed "fire clay." This term is used for a clay of comparative purity which subjected to heat fuses at relatively high temperatures, and can be used in the manufacture of burnt products, such as porcelain, enameled brick, china wares, sewer pipes, terra-cotta, etc.

Dr. Geo. E. Ladd, from his work in the clay area, the results of which are set forth in Bulletin No. 6—A of the State Geological Survey, concludes that these clay deposits were formed at a period when the sea-shore approximately coincided with the fall line previously described; the clay beds accumulating in lagoons and quiet off-shore stretches.

The most important deposits occur in the lowest formation of the Cretaceous beds, known as the Potomac group.

Extensive plants for the manufacture of sewer pipes, terra-cotta articles, etc., are located at several points in the clay belt.

Pure white clay, free from grit, is largely used in the manufacture of wall-paper, and much of the Georgia clay is suitable for this purpose.

The twentieth United States Geological Survey Report shows that articles to the value of \$834,908 were manufactured from Georgia clay in 1898, exclusive of pottery.

MARLS AND PHOSPHATES.

Numerous beds of marl occur in the counties forming the lower part of the State, and can be used to advantage for marling adjacent lands.

Mr. McCallie, Assistant State Geologist, in his report on the Phosphates and Marls of Georgia (Bulletin No. 5—A), in referring to the marls of New Jersey, says: "The marls in South Georgia are found in many instances to equal in plant-food those of New Jersey; and if abundantly

and judiciously used, there appears to be no reason why they might not produce a similar effect on the fertility of the soil."

Deposits of phosphate have been found and mined to a limited extent in Thomas county.

LIMESTONE.

Limestone beds of good quality, both for calcimining and for building purposes, are found in the Paleozoic area. Lime for local consumption has also been made for years from a narrow belt of limestone in Hall and Habersham counties, in the Crystalline area.

Limestone suitable for calcimining is also to be found at different localities in the coastal plain region.

Figures from the United States Geological Survey Report show the production of lime in Georgia in 1898 to have amounted to \$57,803. This indicated an increase of \$25,803 over that in 1897, and of \$28,722 over the production for 1896.

Hydraulic cement rock is also found in the Paleozoic area. A good cement is obtained from beds in Bartow county. The production of cement in Georgia in 1898, as given by the United States Geological Survey Report, was valued at \$13,500.

ROOFING-SLATE AND STONES FOR BUILDING, INTERIOR DECORATIVE WORK AND MONUMENTAL PURPOSES.

SLATE.

Roofing-slate of good quality is quarried at Rockmart in Polk county. In the twentieth report of the United States Geological Survey, the production in Georgia for 1898 is put at 3,450 squares, valued at \$13,125.

Figures received from Dr. Day show the value of the output for 1899 to have amounted to \$7,500.

MARBLE.

The marbles of Georgia occur in a narrow belt about sixty miles long in the contact region of the Paleozoic and Crystalline areas. The belt traverses Fannin, Gilmer, Pickens and Cherokee counties. The most important quarries are in Pickens county.

For a number of years the marble industry in Georgia has steadily grown in importance, and at the present time Georgia marble is recog-

nized all over the Union as one of the most superior stones for building and decorative work that can be purchased.

The following figures giving the production from 1890 to 1899, from the United States Geological Survey Report, and those for 1899 furnished by Dr. Day, show the importance of the industry:

1890	\$196,250	1895	\$689,229
1891	275,000	1896	617,380
1892	280,000	1897	598,076
1893	261,666	1898	656,808
1894	724,385	1899	742,554

Many handsome structures have been built in various parts of the country of Georgia marble and testify to its beauty and popularity as a building-stone.

Among others may be mentioned the State capitol of Rhode Island and the Corcoran Art Gallery at Washington.

GRANITE.

Granites of good quality occur in immense quantities in a number of localities in the Crystalline area. Large amounts are quarried annually for building, street-paving and monumental work.

Stone Mountain, in DeKalb county, is an immense mass of granite about six hundred and fifty feet high, and having a circumference at the base of something like seven miles. Extensive quarrying operations have been carried on at this mountain for years.

Among others, a belt of blue granite, designated by Dr. Thos. L. Watson, Assistant State Geologist, as the Lexington-Oglesby blue granite belt, traverses Oglethorpe and Elbert counties and furnishes most superior stone for decorative and monumental work.

Dr. Watson, who is just completing an extensive report for the State Geological Survey on the granites of Georgia, is authority for the statement, that, "there is in the State an abundance of granite suitable for the various purposes to which the stone is put, of a quality unexcelled anywhere."

From figures received from Dr. Day it is seen that the granite output of the State in 1899 was valued at \$411,344.

GNEISS.

At Lithonia, Georgia, large quantities of contorted gneiss are quarried. There is a number of localities in the Crystalline area where gneiss can be had, suitable for curbing and paving stones.

SANDSTONE.

Sandstones suited for building work are to be found in several counties in the Paleozoic area. A very fine, brown sandstone is quarried in Catoosa county.

An interesting exhibit of sample cubes of the various building-stones of the State has been arranged by State Geologist Yeates, and is kept on exhibition in the museum at the State capitol.

MINERAL SPRINGS, ARTESIAN WELLS AND
WATER-POWERS.

MINERAL SPRINGS.

A number of mineral springs of note are to be found in the Paleozoic and Crystalline areas. Among those of medicinal value may be mentioned, chalybeate, sulphurous and lithia waters.

The twentieth United States Geological Survey Report shows an output of 197,100 gallons of mineral waters in Georgia in 1898, valued at \$39,230.

ARTESIAN WELLS.

The artesian wells of Georgia are confined to the coastal plain region.

Mr. S. W. McCallie, in Bulletin No. 7 of the State Geological Survey, in the concluding chapter of his report on the artesian wells, says: "While there is much yet to be learned about the underground water system of the coastal plain, there is, nevertheless, sufficient known already to warrant the statement, that almost this entire portion of the State is underlaid by pervious beds, which will furnish large quantities of pure, wholesome water when pierced by the drill. It is not to be inferred by this statement, however, that these water-bearing beds will furnish flowing wells. On the contrary, the flowing wells will be found to be limited to certain areas not yet fully defined."

It is further shown by Mr. McCallie's report that the average depth of the wells already bored is about 450 feet, and that the various strata penetrated consist of soft limestones, clays and sands, so that the wells can be had for a comparatively small outlay of money.

The marked sanitary advantages that have resulted to many towns in Southern Georgia through the supply of pure, wholesome drinking water, obtained from artesian wells, hardly requires comment.

WATER-POWERS.

The streams of Georgia furnish water-powers at numerous localities, varying in amount of power all the way from that furnished by the small cascade that runs the farmer's individual mill to that of the great shoals and falls, amounting to from 20,000 to 30,000 horse-power.

The drainage system of the State comprises nine basins, as follows: 1st. The Tennessee basin, drained by tributaries of the Tennessee river. 2d. The Mobile basin, draining into the Gulf of Mexico by the Coosa and Tallapoosa rivers. 3d. Apalachicola basin, drained by the Chattahoochee and Flint rivers. 4th. The Altamaha basin, drained by the Oconee and Ocmulgee rivers, which empty into the Altamaha, flowing to the Atlantic Ocean. 5th. The Ogeechee basin, drained by the Ogeechee river into the Atlantic Ocean. 6th. The Savannah basin, drained by the Savannah river into the Atlantic. 7th. The Ocklockonee basin, drained into the Gulf through Ocklockonee bay. 8th. The Suwannee basin, drained into the Gulf by the Suwannee river. 9th. The Satilla and St. Mary's basin, drained by the rivers of the same name into the Atlantic.

Speaking generally, and leaving out a few notable cases, the largest water powers of the State occur at or just above the fall line running through Columbus, Macon and Augusta, where the streams pass from the hard rocks of the Crystalline area to the softer formations of the coastal plain; and on the line formed by the contact of the Paleozoic and Crystalline areas in the northwest. This latter line passes through Polk, Bartow, Gordon and Murray counties, and is known as the western fall line as distinguished from the other, which is called the southern fall line.

In addition to the larger powers located on these fall lines, numerous other powers are to be found at various points on different streams throughout the State.

The following list of important streams and tables of powers is taken by permission from Bulletin No. 3—A, of the State Geological Survey:

TENNESSEE BASIN--IMPORTANT STREAMS

STREAM.	TRIBUTARY TO	COUNTY.	REMARKS.
Nickajack Creek	Tennessee River	Dade	The streams of Fannin, Union and Towns counties are a succession of shoals from their heads to the State line; but no surveys have been made of the water-powers.
Lookout Creek	"	"	
Chattanooga Creek	"	Walker	
Chickamauga River	"	"	
West Chickamauga Creek	Chickamauga River	"	
Middle Chickamauga Cr.	"	Catoosa	
East Chickamauga Creek	"	Whitfield	
Toccoa River	Hiwassee River	Fannin	
Fightingtown Creek	Toccoa River	"	
Hemphreys Creek	"	"	
Nantootlee Creek	"	"	
Notteley River	Hiwassee River	Union	
Hiwassee River	Tennessee River	Towns	
Cooper's Creek	Notteley River	Union	
Brasstown Creek	Hiwassee River	"	
Choctaw Creek	"	"	
Wills Creek	"	"	

MOBILE BASIN--IMPORTANT STREAMS.

Coosa River.	Alabama River	Floyd	{ Formed by junction of Oostanaula and Etowah at Rome (navigable water). Furnishes power to Trion Factory.
Chattanooga River	Coosa River	Chattooga	
Duck Creek	Chattanooga River	Walker	Navigable.
Silver Creek	Coosa River	Floyd	
Cedar Creek	"	Polk and Floyd	Succession of cataracts for 17 miles, from Ellijay to Carter's Mill; navigable below.
Oostanaula River	"	Gordon and Floyd	
Armuchee Creek	Oostanaula River	Chattooga and Floyd	
John's Creek	"	Floyd	
Oothcaloga Creek	"	Gordon and Bartow	
Connasauga River	"	Whitfield and Murray	
Coosawatie River	"	Gilmer and Gordon	

Sallacoa Creek.....	Coosawattee River.....	Gordon	Large mountain stream. (No survey.) Large power at Ellijay, and others up the stream. (No survey.) Flows also through Dawson, Cherokee and Bartow Counties.
Talking Rock Creek.....	"	Pickens	
Mountain Town Creek	"	Gilmer.....	
Scared Coon Creek.....	"	Pickens	
Ellijay River.....	"	Gilmer.....	
Cartecay River.....	"	Gilmer.....	Has one cotton factory and many undeveloped shoals. The great Marble Valley of Pickens County. See table for power.
Etowah River.....	Coosa River.....	Lumpkin and Floyd	
Euharlee Creek	Etowah River.....	Polk and Bartow	
Raccoon Creek	"	Paulding.....	
Pumpkinvine Creek	"	"	
Allatoona Creek.....	"	Cobb and Bartow	{ Amicalola Falls, 625 feet high, on head waters. See table for power. Source of Kin Mori mining ditch, 35 miles long. Source of Cincinnati Consolidated mining ditch, 25 miles long, with laterals amounting to 25 miles more. Source of Battle Branch mining ditch.
Little River.....	"	Cherokee	
Shoal Creek.....	"	"	
Sharp Mountain Creek	"	Cherokee and Pickens.....	
Long Swamp Creek.....	"	Pickens	
Sitting Down Creek	"	Forsyth	Source of Kin Mori mining ditch, 35 miles long.
Amicalola River	"	Dawson	
Nimble Will Creek.....	"	Lumpkin.....	
Two Run Creek	"	"	
Shoal Creek.....	"	Dawson	
Mill Creek	"	Lumpkin.....	Source of Cincinnati Consolidated mining ditch, 25 miles long, with laterals amounting to 25 miles more. Source of Battle Branch mining ditch.
Oamp Creek	"	"	
Jones Creek.....	"	"	
Tallapoosa River.....	"	Haralson.....	
Little Tallapoosa River	"	Carroll	

THE MOBILE BASIN—WATER POWERS

LOCATION OF WATER-POWER	POINT OF SECTION	STAGE	Cubic feet per second	Fall in feet.	Length of Shoal	Gross Horse-power ¹	Source of Information	REMARKS
BARTOW COUNTY								
Oothoaloga Creek	Gordon County line	Minimum	15.0	6.00	.....	10.2	Locke	
"	Adairsville	"	7.0	6.00	.....	4.7	"	
Lewis Spring	Near Adairsville	"	8.0	10.00	.....	9.0	"	
Cedar Spring	Martillo's Mill	"	2.5	18.00	.....	5.0	"	
" Creek	Gordon County line	"	8.0	12.00	.....	11.0	"	
Fork of Pine Log Creek	McCandless & Parrott M	"	18.0	20.00	.....	41.0	"	
" " "	Johnson's Mill	"	14.0	15.00	.....	23.8	"	
Sallacoa Creek	Gordon County line	"	20.0	20.00	.....	45.4	"	
Stamp Creek	Pool's Furnace	"	12.0	20.00	.....	27.3	"	
"	At mouth	"	24.0	20.00	.....	54.5	"	
Boston Creek	At mouth	"	4.0	20.00	.....	9.0	"	
Rogers Creek	At mouth	"	7.0	20.00	.....	16.0	"	
Etowah River	At mouth of Allatoona Cr.	Average low water	833.3	15.00	.....	1420.5	10th U. S. Census	
"	Etowah Mining Co	Average low water	833.3	80.00	.....	7575.7	"	
Pettis Creek	At mouth	Minimum	20.0	5.00	.....	11.8	Locke	
Nancy's Creek	At mouth	"	6.0	5.00	.....	8.4	"	
Two Run Creek	Kingston	"	26.0	16.00	.....	17.3	"	
Onaseena Creek	"	"	5.0	20.00	.....	11.3	"	
Bansley's Creek	Near mouth	"	5.0	18.00	.....	10.2	"	
Allatoona Creek	2½ m. from mouth	"	25.5	12.00	.....	49.3	"	
Pumpkinville Creek	2 m. from mouth	"	70.0	10.00	.....	79.5	"	
Raccoon Creek	1 m. from mouth	"	39.0	10.00	.....	44.3	"	
Euharlee Creek	2 m. from mouth	"	120.9	12.00	.....	164.8	"	
CARROLL COUNTY								
Little Tallapoosa River	Above mouth of Buck Cr.	Low spr'g	101.4	10.00	.....	115.1	"	
Buck Creek	Branch of Tallapoosa	"	16.6	10.00	.....	19.0	"	
Indian Creek	"	"	7.0	10.00	.....	7.9	"	
Buffalo Creek	"	"	6.0	10.00	.....	6.8	"	
CHATTOOGA COUNTY								
Chattooga River	Trion Factory	Ordinary	166.6	16.00	2¼ m.	303.0	10th U. S. Census	Water-power supplemented by steam for four months.

¹ Net horse-power=80 per cent. of gross horse-power.



HURRICANE FALLS, TALULAH, GA.

CHATTOOGA COUNTY (Con.)									
Armuchee Creek	Subligna	Low spring	41.6	10.00		47.3	D. C. Barrow		
Little Turtle Creek	Near mouth	"	5.5	10.00		6.2	"		
Raccoon Creek	Lot 39	"	4.5	10.00		5.1	"		
Rough Creek	At mouth	"	8.8	10.00		10.0	"		
CHEROKEE COUNTY									
Etowah River	Canton	Low water	733.3	6.25	6000'	520.0	B. M. Hall	Surveyed Aug. 27, 1890.	
Mill Creek	"	Low spring	45.0				D. C. Barrow		
Etowah River	Franklin Gold Mine	Average low water	686.6	15.00		1136.3	10th U. S. Census	{ Name now changed to Creighton Mine.	
Etowah River	Palmer's Mill	Low water	216.6	10.00		246.2	D. C. Barrow		
Shoal Creek	Howser's Mill	"	83.3	16.00		60.6	"		
Amicalola River	Dawsonville & J. R'd	"	150.0	200.00	17000'	3400.0	B. M. Hall	{ This is at Heard's Mill. There are other great falls below and above. Amicalola Falls. At Kin Mori Mine. Cin. Consolidated Mines.	
Amicalola Creek	Bart Crane's	Low water	10.0	625.00		710.2	"		
Nimble Will Creek	Kin Mori Ditch	Ordinary	25.0	300.00		852.2	"		
Shoal Creek Ditch	Near Dawsonville	"	5.0	200.00		113.6	"		
FLOYD COUNTY									
Etowah River	Horse Shoe Bend		No measurement	No survey		Said to be large power		Between Rome and Kingston.	
Armuchee Creek	Jones's Mill	Ordinary	133.8	10.00		142.3	Locke	Little above low water.	
Little Fork, Armuchee Cr.	Texas Valley	"	41.0	15.00		60.0	"	Echols' Mill.	
Big Fork, "	White's Bridge	"	48.0				"		
"	Hammond's Mill	"	48.0	8.00		43.6	"		
John's Creek	Near mouth	"	15.0	8.00		13.6	"		
Silver Creek	"	"	24.0	18.00		49.1	"		
Cedar Creek	Thoman's Mill	Minimum	70.0	10.00		79.5	"		
Little Cedar Creek	Near mouth	"	20.0	14.00		32.7	"		
"	Cave Springs	Low spring	60.0	10.00		68.2	"		
Big Spring	"	"	8.0				"		
FORSYTH COUNTY									
Beaver Run Creek	At mouth	Flush	75.0	20.00		170.4	D. C. Barrow		
Sitting Down Creek	Halbrook's Mill	Low spring	30.0	7.00		23.8	"		
"	Pool & Heard's	"	30.0	15.00		51.1	"		
GORDON COUNTY									
Oothcaloga Creek	Calhoun Mills	Low spring	40.0	9.00		40.9	D. C. Barrow		
Connesauga River	At mouth	"	291.6				"	Flat stream.	

THE MOBILE BASIN—WATER-POWERS—Continued

LOCATION OF WATER-POWER	POINT OF SECTION	STAGE	Cubic feet per Second	Fall in feet	Length of Shoal	Gross Horse power ¹	Source of Information	REMARKS
Coosawattee River.....	Carter's Mill.....	Low spr'g	541.0	9.00	....	562.3	D. C. Barrow.	{ Dam is only 9 ft., but fall is 50 ft. in less than 2 ms.
" ..	Two miles above Carter's..	"	541.0	50.00	....	3073.8	"	{ Heavy fall all the way. (No survey.)
" ..	Ellijay to Carter's	"	541.0	.....	17 m.	.....	"	{ Creek has good shoals; no survey has been made.
Talking Rock Creek.....	At mouth.....	"	108.3	.....	.....	.....	"	{ No fall given.
Salacoa Creek.....	Lot 117, 7th Dist., 8d Sec..	"	100.0	.....	.....	.....	"	{ No fall given.
Snake Creek	Lot 113, 1st Dist.....	"	14.5	.....	.....	.....	"	{ No fall given.
John's Creek.....	Lot 53, 24th Dist., 8d Sec..	"	12.5	.....	.....	.....	"	{ Ten foot head assumed.
HARALSON COUNTY								
Tallapoosa River.....	Waldrop's	"	50.0	10.00	.....	58.8	"	{ Ten foot head assumed.
" ..	McBride's Bridge	Flush	583.3	10.00	.....	662.8	"	{ Ten foot head assumed.
Little River.....	At mouth.....	Ordinary	19.5	10.00	.....	22 1	"	{ Ten foot head assumed.
Bench Creek.....	Rock House.....	Low wat'r	30.5	30.00	.....	69.30	"	{ A 30-foot dam would flood 70 acres.
LUMPKIN COUNTY								
Etowah River.....	Five miles of Dahlonega..	"	200.0	20.00	.....	454.5	"	
" ..	{ Simmon's Mill to Battle Branch Bridge .....	.....	.....	210.00	10 m.	.....	10th U. S. Census	
" ..	Falls.....	.....	.....	100.00	½ m.	.....	B. M. Hall	Near Cooper's Gap Road.
Battle Branch Ditch	From Mill Creek.....	.....	3.3	300.00	.....	113.6	"	{ Empties into Cane Creek, to increase Hand and Barlow Mill power.
Etowah Ditch.....	From upper Etowah River .....	.....	25.0	200 00	.....	568.1	"	
Jones' Creek.....	Lot 234, 5th Dist., 1st Sec..	Low wat'r	5.0	50.00	.....	28.4	D. C. Barrow	
Nimble Will Creek.....	10 miles from Dahlonega..	"	50.0	12.00	.....	68.1	"	
PICKENS COUNTY								
Big Scared Ocon Creek...	Fairmount Road	"	11.0	10.00	.....	12.5	"	Assumed head.
Talking Rock Creek.	Federal Road	"	18.3	10.00	.....	15.1	"	Assumed head.

¹ Net horse-power = 80 per cent. of gross horse-power.

PICKENS COUNTY—(Con.)	Perseverance Quarries	"	21.6	40.00	1 m.	98.4	B. M. Hall	Perseverance Marble Quar's.
West Longswamp Creek...	Southern Marble Co.'s Mill.	"	6.6	50.00	2,600 ft	94.7	"	Surveyed January, 1890.
East Longswamp Creek ...	"	"	8.6	210.00	.....	87.5	"	{ Pelton wheel, 1 mile ditch and 1,500 ft. pipe.
Rocky Creek.	"	"	46.6	.....	.....	.....	"	Fall about 30 ft. in 1 mile.
Long Swamp Creek	Georgia Marble Co.....	"	50.7	16.00	3,200 ft	92.1	"	Surveyed November, 1890.
"	Blue Ridge Marble Co.....	"						
POLK COUNTY.							D. C. Bar-	
Euharlee Creek	Rockmart.....	Low wat'r	25.0	10.00	.....	28.4	row	
"	2 miles north of Rockmark.	Low spr'g	19.0	10.00	.....	21.6	"	
"	Hightower's Mill.....	"	5.4	90.00	.....	55.2	"	
Big Spring	2 miles from Van Wert....	"	5.0	.....	.....	.....	"
Little Cedar Creek.....	Young's Mill.....	"	19.3	10.00	.....	20.7	"	
Big Spring	Cedartown	"	9.6	.....	.....	.....	"
Gut Creek	At mouth	"	26.6	10.00	.....	80.8	"	Assumed head of 10 feet.
PAULDING COUNTY.								
Little Pumpkinvine Creek.	16 miles from Marietta....	"	10.0	20.00	.....	22.7	Locke	
Raccoon Creek.....	Chappel's Store	"	22.0	12.00	.....	80.0	"	
WALKER COUNTY.							D. C. Bar-	
Fork of Dry Creek	One-half mile from mouth.	"	6.5	10.00	.....	7.8	row	
WHITFIELD COENTY.								
Swamp Creek	Lot 113.....	.....	33.3	10.00	.....	37.8	"	Assumed head.
Carpenter Creek	One-half mile So. of Tilton.	.....	11.0	10.00	.....	12.5	"	Assumed head.
Mill Creek	Lot 148, 13th Dist., 3d Sec.	.....	16.0	10.00	.....	18.1	"	Assumed head.
Etowah River.....	{ For 17 miles above W. & A.	Low wat'r	833.3	102.00	17 m.	9,659.0	.....	{ From mouth of Little R. in Cherokee Co. to W. & A.
"	A. bridge	"	1,000.0	154.00	45 m.	17,500.0	.....	{ R.R. bridge in Bartow Co.
"	Cartersville to Rome.....	"						

The foregoing gives a very meagre idea of the water powers of this basin. The surveys made by Messrs. Barrow and Locke, Assistant State Geologists, in 1874-'75, were confined mainly to that part of the basin, in which the streams have very few shoals of importance. The great shoals on the Coosawattee, the Cartecay and the Amicalola rivers, and the head streams of the Etowah River have as yet received very little attention.

MOBILE BASIN — UTILIZED POWER.

STREAM	COUNTY	KIND OF MILL	No. of Mills	Total fall used	Total H. P. used	REMARKS.
Tallapoosa River.....	Haralson.....	Flour and grist.....	3	16	67	
".....	".....	Saw.....	1	7	12	
".....	Paulding.....	Flour and grist.....	1	10	10	
Tributaries of Tallapoosa R.	Haralson.....	".....	7	71	92	
".....	".....	Saw.....	1	6	5	
".....	Carroll.....	Cotton gin.....	1	6	.....
".....	".....	Flour and grist.....	10	142	151	
".....	".....	Saw.....	3	32	36	
".....	".....	Tannery.....	1	24	6	
".....	".....	Woolen.....	2	20	9	
Tributaries of Coosa River.	Floyd.....	Flour and grist.....	14	183	204	
".....	".....	Saw.....	3	37	43	
".....	".....	Woolen.....	2	15	17	
".....	".....	Cotton gins.....	2	23	20	
".....	Polk.....	Machine shop, etc.....	.....	4	70	
".....	".....	Flour and grist.....	6	125	138	
Etowah River.....	Dawson.....	{ Flour and grist, saw and } tannery.	.....	18	58	Cedartown.
".....	".....	Stamp mill.....	1	.....	.....
".....	".....	Flour and Grist.....	4	83	50	
".....	".....	Saw.....	2	42	27	
Tributaries of Etowah R.	Polk.....	Flour and grist.....	2	30	40	
".....	Floyd.....	".....	2	16	47	
".....	Bartow.....	".....	14	156	818	
".....	Paulding.....	".....	9	107	79	
".....	".....	Saw.....	2	24	34	
".....	".....	Woolen.....	1	12	4	
".....	Cobb.....	Flour and grist.....	2	26	26	
".....	Cherokee.....	".....	12	195	187	
".....	".....	Cotton gins.....	2	25	56	
".....	".....	Saw.....	5	78	64	
".....	Pickens.....	".....	5	54	50	
".....	".....	Furniture.....	2	15	20	

APALACHICOLA BASIN — IMPORTANT STREAMS

NAME OF STREAM	TRIBUTARY TO	COUNTY	REMARKS
Chattahoochee River.....	Apalachicola River.....	.....	Large shoal on creek 2 m. from mouth.
Standing Boy Creek.....	Chattahoochee ".....	Muscogee.....	Large cr.; falls 60 ft. in quarter of mile.
Mulberry Creek.....	".....	Harris.....	60 cu. ft. per sec.; 20 ft. fall on shoal at River Road.
Mountain Creek.....	".....	".....	
Old House Creek.....	".....	".....	
Flat Shoals.....	".....	Harris and Troup.....	{ Troup Factory, 80 cu. ft. per sec.; 18 ft. fall, low water. (Locke)
Muddy Creek.....	".....	Troup.....	{ 5½ m. from LaGrange; 7 cu. ft. per sec.; 10 ft. fall, low water. (Locke)
Yellow Jacket Creek.....	".....	".....	{ 8¼ m. from LaGrange; 67 cu. ft. per sec.; 10 ft. fall, low water. (Locke)
Beach Creek.....	Yellow Jacket Creek.....	".....	{ 5 m. from LaGrange; 35 cu. ft. per sec.; 15 ft. fall; low water. (Locke)
Panther Creek.....	Chattahoochee River.....	".....	{ 3 m. from LaGrange; 25 cu. ft. per sec.; 10 ft. fall, low water. (Locke)
Flat Creek.....	".....	".....	{ Gorham's Mill; 20 cu. ft. per sec.; 12 ft. fall, low water. (Locke)
New River.....	".....	Heard and Coweta.....	{ ¼ m. of mouth; 133.3 cu. ft. per sec.; 10 ft. fall low spring. (Locke)
Whittaker Creek.....	".....	Heard.....	{ Whitaker's Mill; 91 cu. ft. per sec.; 80 ft. fall. (C. O. Anderson)
Hillabuhatchee Creek.....	".....	".....	
Centralhatchee Creek.....	".....	".....	{ 57.9 cu. ft. per sec.; 8 ft. fall, saw mill. (C. C. Anderson)
Wahoo Creek.....	".....	Coweta.....	{ At Sergeant's; 41.4 cu. ft. per sec. at mean low water. Fall 83 ft. in 1,600. (C. O. Anderson)
Cedar Creek.....	".....	".....	{ Cotton factory and grist mill.
Snake Creek.....	".....	Carroll.....	{ 2.6 cu. ft. per sec, 14 ft. fall = ⅓ H. P. per foot of fall. (C. C. Anderson)
Dog River.....	".....	".....	{ Above Watkins' mill; 25 cu. feet per second, low spring. (Locke)
Bear Creek.....	".....	Douglas.....	{ 52.5 cu. ft. per sec. (C. C. Anderson.)
Camp Creek.....	".....	Campbell.....	

Sweet Water Creek	"	{ Paulding, Cobb and } Douglas.	{ Austell Shoals, near mouth, has 80 feet of fall and 169.9 cu. ft. per sec. Hayes bridge, 80 cu. ft. per sec., low water. (Locke.)
Powder Springs Creek	Sweet Water Creek	Cobb	{ Powder Springs; 84 cu. ft. per sec., low water. (Locke.)
Nose's Creek	"	"	{ Paper mill; 62 cu. ft. per sec.; 67 ft. head, low spring. (Locke.)
Soap Creek	Chattahoochee River	"	{ 29 ft. fall at Ruff's Mill, and 21 ft. at Concord Factory.
Utoy Creek	"	Fulton	{ Houston's Mill; 28.8 cu. ft. per sec.; 22 ft. fall, low water. (Locke.) Buckhead Road, 97 cu. ft. per sec., flush. (Locke.)
Nickajack Creek	"	Cobb	{ Lot 96, 17th Dist.; 45 cu. ft. per sec., low spring. (Locke.)
Peachtree Creek	"	Fulton and DeKalb	{ 12 cu. ft. per sec. = 1.27 gross H. P. per ft. of fall; Measured July 28, 1892, by B. M. Hall.
Nancy's Creek	Peachtree Creek	"	{ Lot 164, 17th Dist., 5.5 cu. ft. per sec. (Locke.)
Rottenwood Creek	Chattahoochee River	Cobb	{ Wright's Mill; 16.6 cu. ft. per sec.; 23 ft. fall, ordinary stage; gross H. P. = 48.
Long Island Creek	"	Fulton	{ 3 factories at Roswell; total fall, 103 ft., volume about 50 cu. ft. per sec. (C. O. Anderson.)
Willis Creek	"	Cobb	{ Lawrenceville and Buford road; 11.6 cu. ft. per sec. (Locke.)
Vickery's Creek	"	Foreyth, Milton and Cobb.	{ Hamilton's Mill; 2 cu. ft. per sec., 18 ft. fall, low water. (Locke.)
Suwanee Creek	"	Gwinnett	{ Important gold mining stream, with many fine undeveloped powers not surveyed.
Ivy Creek	Suwanee Creek	"	{ Ditch, 7 miles long, diverts Etowah waters across ridge into Cane Creek; 25 cu. ft. per sec., with a head of 200 ft. = 568 gross H. P.; not utilized.
Chestatee River	Chattahoochee River	{ Lumpkin, Dawson, Forsyth and Hall.	{ At Cane Cr'k falls, 16.6 cu. ft. per sec.; 60 ft. fall. At Barlow gold mill, 40 cu. ft. per sec.
Etowah Ditch, entering { Cane Creek	Chestatee River	Lumpkin	{ Has a good shoal.
Cane Creek	"	"	{ Source of Hand Mining Ditch, 25 miles long; furnishes water to many mines for hydraulic mining. The ditch carries from 16 to 25 cu. ft. per sec.; and is 300 ft. above streams near Dahlonega.
Clay Creek	Cane Creek	Lumpkin	
Yahoola Creek	Chestatee River	"	

APALACHICOLA BASIN - IMPORTANT STREAMS—Continued

NAME OF STREAM.	TRIBUTARY TO	COUNTY	REMARKS
Cavender's Creek	Chestatee River	Lumpkin	{ Drains an important gold-mining region of Lumpkin county.
Yellow Creek	"	Hall	{ 7.2 cu. ft. per sec.; 20 ft. shoal near mouth. (Barrow.)
Tessantee River	"	White	{ 95 cu. ft. per sec.; big shoal near mouth.
Shoal Creek	Tessantee River	"	{ Has Asbury's Mill and other good shoals.
Town Creek	"	"	{ Source of Loud Ditch, 25 miles long, used for hydraulic mining.
Jennie's Creek	Town Creek	"	{ To furnish water for proposed Cavender's Creek Ditch.
Tate's Creek	Chestatee River	Lumpkin	{ To furnish water for proposed Cavender's Creek Ditch.
Mill Creek	"	"	{ Large creek; falls over 100 feet to the mile.
Dick's Creek	"	"	{ Castleberry's Mill, 4 miles from Gainesville; 151.5 cu. ft. per sec.; 71 ft. fall; gross H. P., 122; 25 H. P. used. (C. O. Anderson.)
Turner's Creek	"	White	{ Furnishes water and drainage to "The Glades" Gold Mine.
Little R. from Wahoo Cr.	Chattahoochee River	Hall	{ 13.6 cu. ft. per sec.; 50 ft. fall; shoal above "The Glades" Mine.
Glade Creek	"	"	{ Big Mud Creek, 83.8 cu. ft. per sec.; Little Mud Creek, 20 cu. ft. per sec.
Flat Creek	"	"	{ See Power Table.
Mud Creek	"	Habersham	{ Lake and water-power at Demorest.
Soquee River	"	"	{ 38.3 cu. ft. per sec. at mouth. (Barrow and Locke.)
Hazel Creek	Soquee River	"	{ 16.8 cu. ft. per sec. at mouth. (B. M. Hall, estimated)
Deep Creek	"	"	{ Duke's Creek Falls, 12.8 cu. ft. per sec.; 300 ft. fall. (Barrow)
Shoal Creek	"	"	{ Minnehaha Falls, 8.6 cu. ft. per sec.; 800 ft. fall. (Barrow)
Mossy Creek	Chattahoochee River	White	{ Annie Ruby Falls, 7.1 cu. ft. per sec.; 300 ft. fall. (Barrow)
Duke's Creek, North Fork	"	"	
"	"	"	
Smith's Creek	"	"	



NATURAL DAM, BIG POTATO CREEK, UPSON COUNTY.

		{ Large Creek with fine undeveloped power, enough for running 100,000 spindles. (U. S. Govern- ment Report)	
Flint River.....	Apalachicola River }	Webster, Sumter, Terrell .	
Kinchafoonee Creek	Flint River	Macon	
Buck's Creek.....	" "	Macon and Taylor.....	
Whitewater Creek	" "	Taylor	
Cedar Creek	Whitewater Creek	"	
Parchelaggee Creek	Flint River	Crawford	
Spring Creek.....	" "	Upson	
Little Potato Creek	" "	Upson and Pike	
Big Potato Creek	" "	Pike	
Wasp Creek.....	Big Potato Creek	"	
Grape Creek	" "	Talbot	
Laxer Creek	Flint River	Meriwether and Talbot.....	
Pigeon Creek.....	" "	Meriwether	
Oane Creek	" "	"	
Red Oak Creek	" "	Pike	
Elkin's Creek	" "	Cowets and Fayette	
Line Creek	" "	Fayette	
Whitewater Creek	Line Creek.....		

APALACHICOLA BASIN — WATER POWERS

Utilized Net H. P.	LOCATION OF WATER- POWER	POINT OF SECTION	Stage of Water	Cable ft. per Second	Fall in feet	Length of Shoal	Gross H. P. ¹	Source of Informa- tion	REMARKS
60	SOQUEE RIVER								
	Habersham county.....	Clarksville Woolen Mill	0.0	266.6	26.0	1,000'	788.6	{ O. O. An- derson.	Only 18 ft. used.
100	"	Porter Mills, Shoal No. 1	"	266.6	14.4	100'	436.3	"	{ See fluctuation tables: 0.0=min. observed wa- ter.
150	"	Porter Mills, Shoal No. 2	"	291.6	45.2	1,400'	1,369.0	"	
None	"	Porter Mills, Shoal No. 3	"	.....	15.0	1,200'	497.0	"	
	CHATTAHOOCHEE RIVER								
Corn Mill	White County.....	Nicholls' Mill	Min. L. W.	72.0	10.0	.....	81.8	{ Barrow & Locke	
None	White & Habersham Cos	Duncan Shoal	0.0	683.3	7.6	400'	589.2	{ C. C. An- derson	{ Includes Soquee River at mouth. Below mouth of Soquee.
"	"	Carpenter Shoal	"	683.3	8.2	400'	248.4	"	
"	"	Johnny's Ford Shoal	"	683.3	5.4	1,200'	419.3	"	
"	"	Gearing Shoal	"	683.3	1.8	800'	101.0	"	
"	"	Fishtrap Shoal	"	683.3	1.8	800'	188.8	"	
"	"	Bull Shoal	"	683.3	7.0	1,800'	543.5	"	{ Foot, 3 miles below mouth of Soquee. Can be developed as one power.
"	"	Last Six Shoals, total ..	"	683.3	28.0	13,200'	2,950.7	"	
"	"	Rock House Shoal	"	750.0	8.7	900'	315.3	"	
"	"	Mountain Island Shoal ..	"	766.6	7.3	1,800'	635.8	"	
"	"	Lulu Bridge	"	788.3	2.0	1,200'	178.0	"	
"	Hall County	Reynolds	"	900.0	6.0	1,200'	545.4	"	
"	"	Seven Islands	"	816.6	4.0	.....	371.2	"	
"	"	Savage Shoal No. 1	"	833.3	1.0	1,200'	94.7	"	
"	"	Savage Shoal No. 2	"	838.3	2.6	1,200'	236.7	"	
"	"	Peg's Shoal	"	838.3	6.3	2,580'	596.0	"	
"	"	Stringer's Ford	"	838.3	10.0	1,200'	947.0	"	
"	"	Wilson Shoal	"	933.3	6.5	2,500'	631.4	"	
"	"	Thompson's Bridge	"	988.3	.....	.....	.....	"

¹ Net H. P.=80 per cent. of gross H. P.

			933.3	6.70	5,500'	710.6	U. S. Sur.	{ Vol. estimated from Sur. " of O. O. Anderson.
"	"	Shallow Ford.....	"	"	"	"	"	"
"	"	Johnson's Shoal.....	933.3	8.20	8,600'	339.4	"	"
"	"	Mooney's Shoal.....	933.3	3.20	5,600'	389.4	"	"
"	"	Overby's Shoal.....	1,450.0	6.90	800'	1,187.0	"	{ Below Mouth of Ches- tatee.
Mill and Gin, 30 }	"	Brown's Bridge.....	1,450.0	17.00	8,500'	2,801.0	"	{ Vol. estimated from Sur. " of O. O. Anderson.
"	"	Pirkle Shoal.....	1,450.0	3.90	4,000'	642.3	"	"
"	Gwinnett County.....	Garner's Shoal.....	1,666.6	"	"	"	"	"
"	"	Bridge Shoal.....	2,000.0	16.90	1,182'	3,941.0	"	"
"	"	Jones's Shoal.....	2,083.3	8.10	1,200'	733.9	"	"
"	Milton County.....	Island Ford Shoal.....	2,133.3	9.00	5,000'	2,181.0	"	"
None	Cobb and Fulton Co's.....	Roswell Shoal.....	2,190.5	18.00	{ about 4,480.0 2 mls.	Anderson	{ From Bridge to head of Bull Sluice.	
"	"	Bull Sluice Shoal.....	2,200.0	25.30	1 mile	6,325.0	"	On Pink Power Property.
"	"	" " continued	2,200.0	8.40	3,900'	1,600.0	"	On Strapp & Power
"	"	Cochran Shoal.....	2,333.3	6.50	2,700'	1,723.0	"	Above Power's Ferry.
"	"	Devil's Race Course.....	2,333.3	10.50	2,500'	2,784.0	"	Below
"	"	Upper Thornton Shoal.....	2,333.3	4.60	1,100'	1,219.0	"	" Below "The Narrows."
"	"	Long Island Shoal.....	2,358.3	10.00	5,900'	2,679.0	"	{ Head of Island to Little Nancy's Creek.
"	"	Top of Cochran Shoal } to foot of L. I. Shoal }	2,358.3	32.80	18,100'	8,790.0	Hall	{ Includes the four shoals above.
"	"	Howell's Shoal.....	2,366.6	10.70	4,000'	2,877.0	Anderson	"
"	"	W. & A. R. R. Bridge.....	2,500.0	"	"	"	Anderson	"
"	Campbell County.....	Redman's Shoal.....	2,500.0	3.00	1,000'	848.0	"	"
"	"	Pumpkintown Shoal.....	2,666.6	8.00	800'	909.0	"	"
"	"	Medetis Shoal.....	2,666.6	8.40	2,000'	2,545.4	"	"
"	Coweta County.....	Island Shoal.....	2,750.0	12.50	5,280'	3,906.0	"	"
"	"	Fridell Shoal.....	2,750.0	9.00	1,400'	2,812.5	"	"
"	"	McIntosh Shoal.....	2,833.3	11.62	19,000'	3,741.0	"	"
"	"	Hilly Mill.....	2,833.3	7.00	2,600'	2,632.5	"	"
"	Heard County.....	Bush Head Shoal.....	2,916.6	5.00	1,000'	1,657.0	"	Fall by B. M. Hall.
"	"	Hendrick's Shoal.....	2,916.6	16.50	4,000'	5,468.7	"	Grist-mill.
50 H. P.	"	"	"	"	"	"	"	"

¹ These three shoals form one continuous shoal four miles long with a fall of fifty feet.

² Known as the Vining Shoal, being near Vining Station on W. & A. R. R.

APALACHICOLA BASIN—WATER-POWERS—Continued

Utilized Net H. P.	LOCATION OF WATER-POWER	POINT OF SECTION	Stage of Water	Cubic Feet per Second	Fall in Feet	Length of Shoal	Gross H. P. ¹	Source of Informa- tion	REMARKS
None	Heard County	Jackson Shoal	0.0	3,068.6	6.7	3,000'	2,286.7	Anderson	
"	"	Seven small Shoals	"	3,333.8	13.0	"	4,924.0	"	
"	Troup County	Swanson Shoal	"	3,500.0	7.0	1,500'	2,784.0	"	
"	"	Small Shoals	"	3,750.0	3.5	"	1,491.5	"	
"	"	McGees' Bridge	"	4,000.0	8.3	3,000'	3,772.7	"	Three Shoals.
"	"	Buzzard and Reed Isl'd.	"	4,166.6	8.3	3,000'	3,930.0	"	
"	"	Bentley's Mill	"	4,166.6	4.0	"	1,894.0	"	
"	"	Ferrell or Huguley's	"	4,666.6	9.0	"	4,772.7	"	
"	"	Pott's Shoal	"	4,933.3	5.0	3,600'	2,803.0	"	3 or four miles above W. P.
"	"	West Point	"	4,933.3	"	"	"	"	
300 H. P.	Harris County	Jack Todd's Shoal	"	4,933.3	51.0	39,800'	28,591.0	U. S. Sur.	{ Two cotton mills, four miles below W. P. Vol. from O. C. Anderson.
None	"	3 m. below Houston's Ferry	"	4,933.3	4.0	1,100'	2,242.0	"	"
"	"	Hargett's Island Shoal	"	5,000.0	60.0	13,000'	34,091.0	"	"
"	"	Shoal	"	5,000.0	15.0	4,000'	8,522.7	"	"
"	"	Tate Shoals	"	5,000.0	28.0	8,700'	14,772.0	"	"
"	"	Mulberry Shoals	"	5,000.0	22.0	6,300'	12,500.0	"	"
"	"	Near mouth of Standing Boy Creek	"	5,166.6	80.0	10,580'	17,613.0	"	"
"	Muscogee County	Chatta'chee Falls Prop.	"	5,216.6	10.0	3,800'	5,928.0	"	"
"	At Columbus	Lover's Leap	"	5,216.6	42.0	6,300'	24,715.0	"	"
"	"	City Mills	"	5,216.6	37.0	2,600'	21,933.0	"	"
"	"	Eagle and Phoenix Mills	"	5,216.6	10.0	Dam	5,928.0	"	"
"	Hall, Bartow, Muscogee and intervening counties		"	5,216.6	25.0	"	14,820.0	"	"
"	Continuous level from Thompson's Bridge.		"	"	227.0	73 miles	"	"	{ 3 ms. N. of Gainesville to 6 ms. W. of Atlanta.
"	From W. & A. R'y Bridge to West Point		"	"	162.0	108 mls.	"	"	{ 6 ms. W. of Atlanta to West Point.
"	From West Point to Columbus		"	"	362.0	34 mls.	"	"	West Point to Columbus.

¹ Net horse-power=80 per cent. of gross horse-power.

SWEETWATER CREEK.		Low Wt	166.6	80.0	3,900'	1,515.0	B. M. Hall	{ Near Austell, Ga. Easily developed.
Douglas County	Austell Shoals	"	Unk'n	15.0	1,200'	Unk'n	"	{ Dam, race, stamp-mill and pumps.
CHESTNUT RIVER.								
Lumpkin County	Garnet Mine	"	"	20.0	"	"	"	{ Power developed. Dam, stamp-mill and pump.
"	Chestatee Pyrites Co	"	"	L'tge.	Unk'n	"	"	
"	Penitentiary Shoal	"	"	Unk'n	"	"	"	
"	Chestatee Mining Co	"	"	"	"	"	"	
"	Calhoun Mine	"	"	12.0	Dam	"	"	
"	Leather's Ford	"	290.0	12.0	Unk'n	895.0	Barrow	
FLINT RIVER.								
30 H. P.	Meriwether and Pike Cos	0.0	250.0	7.3	200'	207.0	Anderson	{ Grist mill. A four-foot storage- dam will develop 2,680 gross 10-hour H. P., 6 days per week, at low- est water.
40 "	"	Min.L.W.	258.3	32.0	3,000'	934.0	B. M. Hall	{ Water too high for meas- urement.
None	"	Normal.	886.6	32.0	3,000'	3,114.0	Anderson	
"	Upton County	Flush.	1,674.1	14.0	2,900'	"	"	
"	"	Normal.	1,216.2	36.6	3,400'	"	"	
"	"	Flush.	2,607.6	7.0	1,800'	"	Anderson	
BIG POTATO CREEK.								
None	Upton County	Low Wt	108.3	81.0	3,500'	951.0	"	{ 1st drop is 60 ft. in a dis- tance of 500 ft., making 750 gross H. P.
30 H. P.	"	0.0	110.0	115.0	2,700'	1,437.0	"	
30 "	"	"	110.0	13.0	150'	162.0	"	
CHATTahoochee CO.								
Oswatchee Creek	Romney's Mill	Low sp'g	21.0	18.0	"	42.0	Locke	
Woolfolk's Branch	Woolfolk's	"	1.0	65.0	"	7.0	"	
CLAY COUNTY.								
Chemochoche Creek	Weaver's Mill	"	60.0	30.0	"	204.0	Barrow	
Fataula Creek	Rapids	"	240.0	22.0	"	600.0	"	

APALACHICOLA BASIN—WATER-POWERS—Continued

Utilized Net H. P.	LOCATION OF WATER- POWER.	POINT OF SECTION.	Stage of Water	Cube Feet per Second.	Fall in Feet.	Length of Shot	Gross H. P. ¹	Source of Informa- tion.	REMARKS.
	DECATUR COUNTY.								
.....	Limesink Creek.....	Limesink.....	Low spg	2.0	105.0	.....	23.0	Locke.	Creek disappears.
.....	Barnett's Creek.....	Lot 367.....	"	23.0	10.0	.....	26.0	"	{ Flow affected by mills
.....	Attapulgas Creek.....	Thomasville Road.....	"	18.0	.....	.....	.....	"	{ above.
.....	Sanburn's Creek.....	Attapulgas Road.....	"	8.0	.....	.....	.....	"
	EARLY COUNTY.								
.....	Harrod's Creek.....	Early Factory.....	"	20.0	35.0	.....	90.0	"	
.....	Colomochee Creek.....	Early Road.....	"	70.0	12.0	.....	95.0	"	
	QUITMAN COUNTY.								
.....	Hoclarnee Creek.....	Near Mouth.....	Low Wt	6.0	10.0	.....	7.0	"	
.....	Tobehannee Creek.....	" Georgetown.....	"	10.0	10.0	.....	11.0	"	
	RANDOLPH COUNTY.								
.....	Roaring Branch.....	5 miles from Ft. Gaines.	"	4.0	.....	.....	14.0	"	
.....	Wakafortsee Creek.....	Near Chemochechobee.	"	5.0	10.0	.....	5.0	"	
	STEWART COUNTY.								
.....	Wimberly's Branch.....	Gaines & Freeman's M ^l	"	8.8	12.0	.....	12.0	"	
.....	Hodchodkee Creek.....	Scott's Mill.....	"	12.0	10.0	.....	14.0	"	

Many important water-powers are omitted in the Apalachicola Basin for want of data. The foregoing is the best that can be done until more surveys are made. Investigation is especially needed on the Flint River and its upper tributaries.

¹ Net H. P. = 80 per cent. of gross H. P.

APALACHICOLA BASIN — UTILIZED POWER.

STREAM	COUNTY	KIND OF MILL	No. of Mills	Total Fall Used, in Feet	Total Net H.P. Used	REMARKS
Chattahoochee River	Muscogee	Cotton Factories	8	48	2,000	
"	"	Flour and Grist	1	8	100	
"	Harris	"	1	8	50	
"	"	"	1	8	160	
"	Troup	Cotton Factory	1	9	130	
"	Hall	"	1	9	80	
"	"	Building Material	1	9	60	
"	"	Flour and Grist	1	9	11	
"	Cobb	"	1	11	10	
"	Early	"	6	56	72	
Tributaries of Chattahoochee River	"	Sawmill	1	...	25	
"	"	"	1	29	60	
"	Clay	"	3	8	6	
"	"	Cotton Gin	1	8	77	
"	"	Flour and Grist	6	58	96	
"	Quitman	"	4	49	88	
"	"	"	2	24	68	
"	"	Sawmill	1	9	8	
"	Randolph	Flour and Grist	1	83	192	
"	Stewart	"	8	20	22	
"	"	"	2	10	15	
"	Chattahoochee	Sawmill	1	57	75	
"	"	Flour and Grist	4	73	218	
"	"	"	6	6	12	
"	Muscogee	"	1	6	21	
"	Marion	Cotton Gin	1	8	80	
"	"	"	1	8	21	
"	"	Sawmill	1	12	10	
"	Harris	"	1	12	10	
"	"	Flour and Grist	13	285	898	
"	Talbot	"	2	86	47	
"	"	"	2	86	48	
"	"	Sawmill	4	57	65	
"	Troup	"	1	22	8	
"	"	Tannery	22	223	506	
"	"	Flour and Grist	1	20	60	
"	"	Cotton	1	20	60	

APALACHICOLA BASIN — UTILIZED POWER — Continued

STREAM	COUNTY	KIND OF MILL	No of Mills	Total Fall Used, In Feet	Total Net H.P. Used	REMARKS
Tributaries of Chattahoochee River	Meriwether	Flour and Grist	1	80	11	
"	Heard	"	8	91	101	
"	"	Sawmill	3	124	125	
"	Carroll	Cotton	1	30	120	
"	"	Flour and Grist	12	277	160	
"	"	Sawmill	3	58	26	
"	Coweta	Cotton	1	.....	60	
"	"	Flour and Grist	14	275	226	
"	Campbell	"	7	124	180	
"	Douglas	Cotton Gin	1	11	20	
"	"	Flour and Grist	13	202	119	
"	"	Sawmill	6	186	82	
"	"	Tannery	1	60	10	
"	"	Cotton	1	.....	60	
"	"	Woolen-mill	1	14	9	
"	Paulding	Flour and Grist	2	18	60	
"	"	Sawmill	1	20	8	
"	Cobb	Cotton	3	67	875	
"	"	Woolen-mill	2	40	85	
"	"	Cotton Gins	9	185	111	
"	"	Flour and Grist	23	368	454	
"	"	Paper-mill	1	22	75	
"	"	Sawmill	5	45	69	
"	Fulton	"	3	30	31	
"	"	Cotton Gins	3	20	22	
"	"	Flour and Grist	8	157	106	
"	DeKalb	"	7	120	119	
"	"	Furniture	2	47	25	
"	"	Tannery	1	15	10	
"	"	Sawmill	2	24	40	
"	"	"	4	47	44	
"	Gwinnett	Flour and Grist	9	116	68	

FLAT SHOALS ON THE FLINT RIVER, MERIWETHER COUNTY.



"	"	"	Foreyth.	"	"	8	154	187	
"	"	"	"	Sawmill.	"	4	36		
"	"	"	Hall.	"	"	4	45	90	
"	"	"	"	Carriages and wagons.	"	1	22	15	
"	"	"	"	Flour and Grist	"	11	151	175	
"	"	"	Milton	"	"	4	68	82	
"	"	"	"	Sawmill	"	2	28	32	
"	"	"	Lumpkin	"	"	7	141	75	
"	"	"	"	Flour and Grist	"	10	138	134	
"	"	"	"	Tannery	"	1	20	4	
"	"	"	"	Gold Mills	"	3	35	700 ¹	Chestatee River.
"	"	"	"	"	"	8	40	280 ¹	Yahoola Creek.
"	"	"	"	"	"	1	16	40 ¹	Cane Creek.
"	"	"	"	Hydraulic Mining.	"	...	800	600 ¹	Yahoola Ditch.
"	"	"	Habersham	Flour and Grist	"	1	14	10	
"	"	"	"	Leather	"	1	16	6	
"	"	"	"	Woolen-mill.	"	1	20	12	
"	"	"	"	Flour and Grist	"	1	10	15	
"	"	"	White	"	"	1	14	28	
"	"	"	Campbell	"	"	5	90	44	
"	"	"	Clayton	"	"	1	13	12	
"	"	"	Fayette.	"	"	1	18	50	
"	"	"	Campbell	"	"	8	70	148	
"	"	"	Clayton	"	"	8	148	186	
"	"	"	"	Sawmill	"	1	22	15	
"	"	"	Henry	Flour and Grist	"	1	18	15	
"	"	"	Spalding	"	"	2	13	40	
"	"	"	Fayette.	"	"	5	46	109	
"	"	"	Coweta	"	"	4	71	88	
"	"	"	"	Sawmill	"	1	5	12	
"	"	"	"	Tannery	"	1	90	16	
"	"	"	Meriwether	Flour and Grist	"	11	171	138	
"	"	"	"	Sawmill.	"	1	16	15	
"	"	"	"	"	"	1	8	12	
"	"	"	Pike	Wheelwrighting.	"	11	154	276	
"	"	"	"	Flour and Grist	"	8	25	43	
"	"	"	Crawford	"	"	15	191	878	
"	"	"	Upson	"	"	2	29	115	
"	"	"	"	Cotton	"	5	72	102	
"	"	"	"	Sawmill.	"	5	72	102	

¹ Power estimated by B. M. Hall.

APALACHICOLA BASIN — UTILIZED POWER — Continued

STREAM.	COUNTY	KIND OF MILL	No. of Mills	Total Fall		REMARKS
				Used, In Feet	Total net H. P. Used	
Tributaries of Flint River	Upson	Tannery	1	10	5	
"	Talbot	Flouring and Grist	9	214	169	
"	Taylor	Cotton	1	12	40	
"	Marion	Sawmill	1	12	20	
"	"	Flouring and Grist	4	33	52	
"	Taylor	"	10	84	129	
"	"	Sawmill	6	58	95	
"	Schley	Flouring and Grist	6	53	70	
"	Macon	"	5	51	102	
"	"	Sawmill	1	8	30	
"	Dooley	"	2	14	15	
"	"	Flouring and Grist	2	8	30	
"	Sumter	"	7	51	99	
"	Lee	"	4	22	41	
"	Webster	"	8	66	107	
"	"	Sawmill	3	28	33	
"	Randolph	Flouring and Grist	6	69	84	
"	Terrell	Sawmill	2	11	30	
"	"	Flouring and Grist	2	14	15	
"	Calhoun	"	3	10	50	
"	"	Sawmill	1	6	12	
"	Dougherty	Flouring and Grist	1	12	40	
"	"	Sawmill	1	20	20	
"	Worth	"	1	10	20	
"	"	Flouring and Grist	8	25	23	
"	Early	Cotton	1	40	45	
"	"	Flouring and Grist	5	57	62	
"	"	Sawmill	1	9	10	
"	Miller	"	1	8	12	
"	"	Flouring and Grist	1	8	40	
"	Baker	"	3	14	45	
"	Decatur	"	1	5	8	

ALTAMAHA BASIN — IMPORTANT STREAMS
OCMULGEE RIVER

STREAM	TRIBUTARY TO	COUNTY	REMARKS
Ocmulgee.....	Altamaha River.....		
Mossy Creek.....	Indian Creek.....	Houston.....	{ Cotton factory; 12 ft. fall; estimated 120 H. P. { (U. S. Census.)
Indian Creek.....	Ocmulgee River.....	".....	
Stone Creek.....	".....	Bibb.....	{ 8 miles from Macon; 8 cu. ft. per sec.; 12 ft. fall, { low water. (Locke.)
Echaconnnee Creek.....	".....	Monroe and Crawford.....	Has several grist and sawmills. (U. S. Census.)
Snake Creek.....	".....	Twiggs and Bibb.....	
Tobesofkee Creek.....	".....	Bibb, Monroe and Crawford.....	{ Freeman's Mill; 70 cu. ft. per sec.; 20 ft. fall, nor- { mal water. (Locke.)
Walnut Creek.....	".....	Jones and Bibb.....	{ Macon; 5 cu. ft. per sec.; 10 ft. fall, low water. { (Locke.)
Falling Creek.....	".....	Jones.....	
Rum Creek.....	".....	Monroe.....	
Towaliga River.....	".....	Henry, Butts and Monroe.....	{ High falls; see Power Table. Has other shoals { above, and Willis Shoals nearer mouth; 10 ft. fall. { Has two mills; one of them has 27 ft. head. (10th { U. S. Census.)
South Towaliga River.....	Towaliga River.....	Monroe.....	
Towaliga Creek.....	".....	Henry.....	
Tussahaw Creek.....	Ocmulgee River.....	Henry and Butts.....	
Alcovy River.....	".....	Newton and Walton.....	
Cornish Creek.....	Alcovy River.....	Walton.....	
Big Flat Creek.....	".....	".....	
Bear Creek.....	".....	Newton.....	
South River.....	Ocmulgee River.....	".....	
Wildcat Creek.....	South River.....	Newton.....	
Sheel Creek.....	".....	".....	
Walnut Creek.....	".....	Henry.....	
Cotton River.....	".....	".....	{ Has several mills and sites, and is a good stream in { dry weather. (10th U. S. Census.)
Snap Finger Creek.....	South River.....	DeKalb.....	{ At Mitchell's mill, 20 cu. ft. per sec.; low water { (Frobel.)

ALTAMAHA BASIN — IMPORTANT STREAMS — Continued

STREAM	TRIBUTARY TO	COUNTY	REMARKS
Pole Bridge Creek	South River	Rockdale	14.6 cu. ft. per sec.; extreme low water. (Frobel.)
Honey Creek	"	"	14.3 cu. ft. per sec.; extreme low water. (Frobel.)
Yellow River	Ocmulgee River....	Newton, Rockdale, Gwinnett.	{ Six miles above Rockdale Paper Mill is Baker's Mill, with 9 or 10 ft. fall, and 4 grist mills above it. (10th U. S. Census.)
Big Haynes Creek.	Yellow River	"	{ Principal tributary of Yellow River. Has many available powers, and is a fine stream in all respects. (10th U. S. Census.)
Little Haynes Creek.....	Big Haynes Creek ..	"	
OCONEE RIVER			
Oconee River	Altamaha River	"	{ Drainage area, 284 sq. miles. Myrick's Mill, 8 ft. fall. (Locke.)
Big Sandy Creek	Oconee River	Wilkinson and Twiggs	
Commissioners Creek	"	Jones and Wilkinson	Drainage area, 196 sq. miles.
Buffalo Creek	"	Washington	Drainage area, 268 sq. miles.
Palmetto Creek	"	"	Drainage area, 375 sq. miles.
Little River	"	Morgan and Putnam	{ Falls 62 ft. on five shoals in 12 miles. The largest single shoal is at Old Factory in Putnam county, + 25 ft. in 900 feet.
Cedar Creek	Little River....	Jasper, Jones and Baldwin.	Three miles from mouth; 18 ft. fall in 600 ft.
Murder Creek	"	Jasper and Putnam	
Indian Creek	"	Morgan and Putnam	
Crooked Creek	Oconee River.	Putnam	
Shoulderbone Creek	"	Hancock	
Sugar Creek.	"	Morgan	
Apalachee River	"	{ Gwinnett, Walton, } Oconee and Morgan }	{ No surveys of the good powers of this river in Gwinnett and Walton counties have been made. Has a shoal 3 miles from its mouth; 10 ft. fall. Has a shoal 2 miles long, 8 miles from Madison.
Hardlabor Creek	Apalachee River	Morgan	
Sandy Creek	Hardlabor Creek	"	
Shoal Creek	Apalachee River	Walton	
Middle Oconee River	Oconee River	Clarke, Jackson and Hall	

Barber's Creek	Mid. Oconee River ..	Oconee and Clarke	{ 20 ft. in 900 ft.; 24 ft. in 180 ft.; and 20 ft. in 600 ft.; all in 8 miles, near mouth; 20 ft. utilized for paper-mill.
Mulberry Fork	Mid. Oconee River ..	Jackson	Good stream for power. No surveys.
North Oconee River	Oconee River	Clarke, Jackson and Hall	
Big Sandy Creek	North Oconee River ..	Jackson and Clarke	{ Harrington's Ford, 15.5 cu. ft. per sec.; 20 ft. fall. (Barrow.)
Walnut Fork	" "	Hall	
Allen's Fork	" "	"	County line; 22.5 cu. ft. per sec.; 10 ft. fall. (Barrow)
Fond Fork	" "	"	Mangum's mill; 10.5 cu. ft. per sec.; 9 ft. fall. (Barrow)
Curry's Creek	" "	Jackson	Near Jefferson; 8 cu. ft. per sec.; 18 ft. fall. (Barrow)

ALTAMAHA BASIN—WATER-POWERS

OCMULGEE RIVER

Utilized Power	LOCATION OF POWER	POINT OF SECTION	Stage of Water	Cubic Feet per Second	Fall in Feet	Length of Shoal in Feet	Gross H. P. ¹	Source of Information.	REMARKS
	YELLOW RIVER								
	Gwinnett County.....	Fain's Mill.....	Low Spr	10.0	20.0	.....	186	{ Barrow	
	"	Steadman's Mill.....	"	64.0	30.0	.....	218	"	
	Rockdale County.....	Rockdals Paper-mill....	Normal	266.6	46.0	8,365	1,394	B. M. Hall	
	"	Glenn Shoal.....	"	283.3	12.0	.....	386	{ 10th U.S.	{ Volume estimated.
	Newton County.....	Bridge Shoal.....	.....	500.0	4.4	.....	250	{ Census	{ Volume from C. C. Anderson.
	"	Cedar Shoals.....	.....	515.4	55.0	2,700	3,221	{ Frobels	{ son.
	"	Dried Indian Shoal.....	.....	515.4	7.0	1,500	410	{ U.S.A.E.	{ Porterdale Factory,
	"	Indian Fishery.....	Low Wr	.....	12.7	525	764	Anderson	{ 3 m. form Covington.
8 H. P.	SOUTH RIVER								
	DeKalb County.....	Flat Shoals.....	"	74.0	24.0	.....	202	Frobel	{ Cotton Gin.
	"	Albert Shoal.....	"	.....	18.0	.....	.....	{ 10th U.S.	{ Cotton Factory of the
	Henry County.....	McKnight's Mill.....	"	93.0	12.0	.....	126	Census	{ Oglethorpe Mfg. Co.
	"	Peachstone Shoal.....	"	120.0	12.0	.....	183	Frobel	{ Not utilized.
135	Newton County.....	Snapping Shoal.....	Flush	617.1	20.0	775	.....	"	{ 12 ft. head utilized;
40 H. P.	"	Island Shoal.....	Low Wt	475.0	16.0	750	863	Anderson	{ 20 ft. head available.
None.....	"	Mann's Bridge.....	"	488.3	10.0	3,000	535	"	{ 28 ft. fall in 1,500 ft.
									{ (G. C. Anderson.)

¹ Net H. P.=80% of Gross H. P.

ALTAMAHA BASIN—WATER-POWERS—Continued

Utilized Power.	LOCATION OF POWER.	POINT OF SECTION.	Stage of Water.	Cubic Feet per Second.	Fall in Feet.	Length of Shoal in Feet.	Gross H. P. ¹	Source of Information.	REMARKS.
.....	Morgan County	Furlow's Shoals	Low Wt	47.0	26.0	4,200	139	U. S. Cen.	8' at mill, and 18' above.
.....	"	Reid's Mill	"	76.0	8.0	.....	69	"	"
150 H.P.	Oconee County	Barnett's Shoal	"	624.1	54.0	4,000	3,850	Anderson.	{ 5 miles below junction of Middle and North Oconee rivers.
.....	Morgan County	Seull's Shoal .....	.....	.....	10.0	Dam	.....	{ 10th U.	{ Powell Mfg. Co.'s dam
.....	"	Park's Mill .....	.....	.....	8.0	"	.....	{ S. Cen.	{ backs water 2 miles.
.....	Intervening two shoals.	.....	.....	.....	7.0	.....	.....	"	Grist mill.
.....	Putnam County	Long Shoal .....	.....	533.8	12.0	1,300	726	"	{ Old factory site, not in use. Head can be made 15 or 20 feet by dam.
.....	Intervening six shoals.	.....	.....	.....	33.0	.....	.....	.....	.....
.....	Baldwin County	Milledgeville .....	.....	740.0	34.0	5 or 6 m.	2,859	{ 10th U.	Canal proposed.
.....	Hall County	6 miles from Gainesville	.....	30.	39.0	.....	138	{ S. Cen.	Head waters.
.....	LITTLE RIVER.	.....	.....	.....	.....	.....	.....	.....	.....
.....	Putnam County	Site of old Eatonton F'y	Low Wt	45.0	25.0	900	127	{ 10th U.	{ Volume estimated. No utilized power.
.....	"	Grist mill .....	"	.....	8.0	.....	.....	"	"
.....	" .....	" .....	"	.....	18.5	.....	.....	"	"
.....	"	Pierson's Mill .....	"	.....	7.0	.....	.....	"	"
.....	"	Humber's Mill	"	108.0	9.0	.....	110	"	Volume estimated.

¹Net H. P. = 80 per cent. of gross H. P.

NOTE.—The foregoing is a very imperfect statement concerning the water-powers of the Altamaha Basin; but it is the best that can be done with the data at hand.



CANE CREEK FALLS NEAR DAHLONEGA GA

ALTAHAHA BASIN — UTILIZED POWER

STREAM	COUNTY	KIND OF MILL	No. of Mills	Total Fall Used, in Feet	Total Net H.P. Used	REMARKS.
Tributaries to Altamaha River.	Tattnall	Flour and Grist.	8	.....	62	
"	"	Sawmill.	2	21	55	
"	Johnson.	Flour and Grist.	2	15	24	
Oconee River	Baldwin	"	2	12	70	
"	Putnam	"	2	15	70	
"	Greene	Cotton Factory	1	10	.....
"	"	Flour and Grist	8	26	104	
"	Clarke	"	1	8	6	
Little River	Putnam	"	4	32	165	
"	"	Sawmill.	1	7	20	
"	Morgan	Flour and Grist	2	22	25	
"	Newton	"	2	47	80	
"	"	"	1	25	15	
"	Walton	Cotton Gin	1	40	45	
"	"	Flour and Grist	1	20	20	
Apalachee River	Morgan	"	1	20	100	
"	Walton	Cotton Factory	5	42	124	
"	"	Flour and Grist	1	22	10	
"	Gwinnett	"	1	22	10	
Other Tributaries of						
Oconee River.	Laurens.	"	3	34	50	
"	"	"	2	22	50	
"	Johnson.	Sawmill.	2	16	23	
"	"	Flour and Grist	3	.....	63	
"	Twiggs	"	3	.....	20	
"	"	Sawmill	1	6	58	
"	Washington	Flour and Grist	8	69	140	
"	Wilkinson	"	12	4	102	
"	"	Sawmill.	8	3	4	
"	"	Agricultural Implem'ts.	1	94	95	
"	Hancock	Flour and Grist	6	60	98	
"	Jones	"	4	37	60	
"	"	"	3	30	82	
"	Baldwin	"	2	73	178	
"	Jasper	"	3	.....	.....
"	Putnam	"	6	.....	.....

ALTAMAHA BASIN — UTILIZED POWER — Continued.

STREAM	COUNTY	KIND OF MILL	No. of Mills	Total Fall Used, in Feet	Total Net H. P. Used	REMARKS
Other Tributaries of						
Oconee River	Putnam	Sawmill	1	8	25	
"	Morgan	Flour and Grist	7		90	
"	Walton	"	6	91	122	
"	Greene	"	1	16	50	
"	"	Sawmill	1	23	32	
"	"	Cotton Gin	2	41	11	
"	Oconee	Flour and Grist	1	22	30	
"	Oglethorpe	"	2	56	30	
"	"	Sawmill	4	128	100	
"	Gwinnett	Woolen-mill	1	16	12	
"	Clarke	Cotton Factory	2	82	330	
North Oconee River	"	"	1	20	100	
Middle Oconee River	"	"				
North and Middle Oconee and Tributaries	"	Sawmill	1	12	10	
"	"	Paper-mill	1	16	75	
"	"	Flour and Grist	4	52	82	
"	Gwinnett	"	1	32	20	
"	"	Sawmill	1	12	12	
"	Madison	Flour and Grist	2	29	13	
"	Hall	"	11	170	130	
"	"	Sawmill	1	16	15	
"	Jackson	"	8	146	141	
"	"	Flour and Grist	13	201	187	
"	"	Cotton Gin	5	82	70	
"	"	Leather	1	30	10	
"	"	Woolen-mill	1	8	6	
Ocmulgee River	Monroe	Flour and Grist	1	12		
"	Jones	"	1	12		
"	Butts	"	4	48	103	
"	"	Sawmill	1	12	40	
"	Jasper	Woolen-mill	1	12	6	
"	Henry	Flour and Grist	2	34	14	

Tributaries of Ocmulgee River.	Wilcox	"	"	"	"	6	4
"	Wilcox	.....	Sawmill.	.....	1	6	24
"	"	.....	Flour and Grist	.....	1	6	10
"	"	.....	"	.....	5	45	46
"	Pulaski	.....	Woolen-mill	.....	1	9	4
"	"	.....	"	.....	1	9	15
"	"	.....	Sawmill.	.....	3	25	46
"	Houston	.....	"	.....	10	186	186
"	"	.....	Flour and Grist	.....	1	12	60
"	"	.....	Cotton Factory	.....	1	8	11
"	Twiggs	.....	Flour and Grist	.....	3	36	90
"	Crawford	.....	"	.....	1	9	20
"	Bibb	.....	"	.....	1	9	80
"	"	.....	Sawmill	.....	1	13	8
"	"	.....	Cotton Gin.	.....	1	9	12
"	Monroe	.....	"	.....	1	11	15
"	"	.....	Sawmill.	.....	3	39	76
"	"	.....	Flour and Grist	.....	1	5	4
"	"	.....	Wool Carder	.....	2	100	120
"	Henry	.....	Flour and Grist	.....	2	30	36
"	"	.....	"	.....	2	6	20
"	"	.....	Sawmill	.....	2	30	40
"	Newton	.....	Cotton Gin.	.....	1	19	15
"	"	.....	Flour and Grist	.....	2	63	18
"	"	.....	Sawmill.	.....	3	34	54
"	Walton	.....	Flour and Grist	.....	1	14	5
"	Gwinnett	.....	"	.....	1	16	76
"	"	.....	Wheelwright.	.....	1	20	60
"	"	.....	Cotton Factory	.....	1	21	25
"	Newton	.....	Paper-mill	.....	2	80	70
"	"	.....	Flour and Grist	.....	2	24	10
"	"	.....	Sawmill	.....	1	14	10
"	Rockdale.	.....	Flour and Grist	.....	1	14	10
"	"	.....	Sawmill.	.....	1	18	90
"	"	.....	Cotton Gin.	.....	1	7	15
"	"	.....	Furniture.	.....	1	6	6
"	"	.....	Paper-mill	.....	6	66	126
"	"	.....	Flour and Grist	.....	1	8	10
"	DeKalb	.....	Cotton Gin.	.....	1	14	15
"	"	.....	Flour and Grist	.....	1	14	15
"	Gwinnett	.....	Flour and Grist	.....	1	14	15
"	"	.....	Furniture	.....	1	14	15
"	"	.....	Sawmill.	.....	1	14	15

Rockdale Paper-mill.

Rockdale Paper-mill.

ALTAMAHA BASIN—UTILIZED POWER—Continued

STREAM	COUNTY	KIND OF MILL	No. of Mills	Total Fall Used, in Feet	Total Net H.P. Used	REMARKS
South River.....	DeKalb	Cotton Factory	1	25	.....
" ".....	Henry	Flour and Grist	1	8	20	
" ".....	"	Agricultural Implem'ts	1	9	3	
" ".....	"	Furniture	1	9	3	
" ".....	"	Sawmill.....	1	9	20	
" ".....	Newton	"	1	30	10	
" ".....	"	Flour and Grist	1	30	25	
" ".....	Rockdale.	"	2	24	39	
" ".....	"	"	1	16	4	
" ".....	"	Cotton Gin	1	9	6	
" ".....	"	Furniture	1	35	65	
" ".....	DeKalb	Flour and Grist	2	10	15	
" ".....	"	Sawmill	1	10	12	
" ".....	"	Cotton Gin	1	10	5	
" ".....	"	Furniture	1	10	5	
" ".....	Fulton	Sawmill	1	22	9	
" ".....	"	Flour and Grist	2	34	24	
Other Tributaries of Ocmulgee R.	Pike	"	2	74	55	
" ".....	Monroe	"	11	157	148	
" ".....	"	"	1	11	9	
" ".....	"	Sawmill	1	11	5	
" ".....	"	Cotton Gin	1	11	8	
" ".....	Henry	Flour and Grist	8	78	38	
" ".....	"	Sawmill	2	38	23	
" ".....	Butts	Flour and Grist	4	52	45	
Tributaries of South River.....	Henry	"	3	119	26	
" ".....	"	"	1	10	10	
" ".....	"	Sawmill	1	.....	5	
" ".....	"	Woolen-mill.	1	.....	33	
" ".....	Clayton	Flour and Grist	2	36	33	
" ".....	Rockdale	"	3	62	48	
" ".....	"	"	1	18	6	
" ".....	"	Sawmill	2	31	22	
" ".....	"	Cotton Gin	1	8	4	
" ".....	"	Leather.	1	.....	.....
" ".....	Newton	Flour and Grist	1	30	12	
" ".....	DeKalb	"	10	180	128	



TOCCOA FALLS.

"	"	Sawmill	8	44	30
"	"	Cotton Gin	6	108	54
"	"	Paper-mill	8	99	152
"	"	Leather	1	15	20
Newton	"	Cotton Gin	1	15	15
"	"	Flour and Grist	2	37	18
"	"	Cotton Gin	1	12	8
Rockdale	"	Flour and Grist	3	70	73
"	"	Sawmill	1	.....	13
Walton	"	Flour and Grist	1	15	8
"	"	" "	8	85	22
Gwinnett	"	" "	2	51	10
DeKalb	"	" "	2	26	25
"	"	Sawmill	2	55	20
"	"	Cotton Gin	2	32	33
"	"	Furniture	1	15	8
Walton	"	Flour and Grist	1	18	8
Gwinnett	"	" "	2	54	32
"	"	Cotton Gin	1	15	5
"	"	Sawmill	1	18	20
Tributaries of Yellow River.					
"	"	"			
"	"	"			
"	"	"			
"	"	"			
"	"	"			
Tributaries of Alcovy River.					
"	"	"			
"	"	"			
"	"	"			

OGEECHEE BASIN—UTILIZED POWER.

STREAM	COUNTY	KIND OF MILL	No. of Mills	Fall Used, in Feet	Total Net H. P. Used	REMARKS
Ogeechee River	Warren	Flour and Grist-mill	2	20.0	30	
"	Hancock	"	2	18.0	40	
"	"	Woolen Mill (Carder)	1	8	8	
"	Warren	Cotton Factory	1	16.0	150	
"	Taliaferro	Flour and Grist-mill	1	22.0	15	
Tributaries to						
Ogeechee River	Liberty	"	1	9.0	20	
"	"	Sawmill	2	27	27	
"	Bulloch	Flour and Grist-mill	5	36.0	20	
"	"	Sawmills	2	17.5	24	
"	Scriven	Flour and Grist-mill	1	10.0	8	
"	"	Sawmill	1	10.0	12	
"	Burke	Flour and Grist-mill	9	75.0	117	
"	Jefferson	"	9	82.0	189	
"	Washington	"	1	21.0	83	
"	Glascok	"	4	60.0	64	
"	"	Sawmill	2	23.0	27	
"	Hancock	Flour and Grist-mill	2	42.0	30	
"	Warren	"	1	9.0	12	

SAVANNAH BASIN—IMPORTANT STREAMS.

STREAMS	TRIBUTARY TO	COUNTY	REMARKS
Savannah River.....	Atlantic Ocean.....	.....	.....
Beaverdam Creek.....	Savannah River.....	Screven.....	{ Jacksonboro, 87.3 cu. ft. per sec.; 7 ft. fall. (Barrow.)
Briar Creek.....	".....	".....	Mill Haven, 565.5 cu. ft. per sec.; 10 ft. fall. (Barrow.)
Rocky Creek.....	".....	".....	Wade's Mill, 12 cu. ft. per sec.; 5 ft. fall. (Barrow.)
Spirit Creek.....	".....	Richmond.....	{ 12 cu. ft. per sec.; 8 ft. fall. (Barrow.) Little Spring Or. at mouth.
Butler's Creek.....	".....	".....	.....
Rock Creek.....	".....	".....	.....
Bottie's Creek.....	".....	Columbia.....	.....
Kiokee Creek.....	".....	".....	.....
Keg Creek.....	".....	".....	{ Near Appling, 30 cu. ft. per. sec.; 10 ft. fall, low water. (Barrow).
Little River.....	".....	McDuffie.....	{ Power at Mrs. J. Belknap Smiths, 47 cu. ft. per sec.; 8 ft. fall; 218 H. P. utilized by six mills on river.
Sweetwater Creek.....	".....	".....	{ Cotton card factory; 21 feet head; 36 gross H. P. (Barrow.)
Soap Creek.....	".....	Lincoln.....	.....
Fishing Creek.....	".....	".....	.....
Pistol Creek.....	".....	".....	.....
Broad River.....	".....	{ Franklin, Madison, } Oglethorpe, etc.	.....
Long Creek.....	Broad River.....	Oglethorpe.....	.....
S. Fork, Broad River.....	".....	".....	.....
Groves Creek.....	".....	".....	.....
Cloud's Creek.....	S. Fork, Broad River.....	".....	.....
Beaverdam Creek.....	".....	".....	.....
Millshoal Creek.....	".....	Madison.....	.....
Bushy Creek.....	".....	".....	.....
N. Fork, Broad River.....	Broad River.....	Franklin and Madison.....	.....
			{ Franklin Co., Toccoa and Carnesville Road, 50 cu. ft. per sec.; low spring. (Barrow.)
			{ 4 m. from Lexington, 7.2 cu. ft. per sec.; 10 ft. fall. (Barrow.)
			{ At Eberhart's Mill, 80 ft. fall in 1 m. (U. S. Cens.)
			{ At Watson's Mill, 80 ft. fall in 1 m. (U. S. Cens.)

SAVANNAH BASIN—IMPORTANT STREAMS—Continued.

STREAM.	TRIBUTARY TO	COUNTY.	REMARKS.
Hudson's Fork	N. Fork, Broad River.....	Banks and Franklin	{ Homer and Mt. Airy Road, 77.3 cu. ft. per sec., normal. (Locke.) 4 miles from Carnesville, 50 cu. ft. per second, normal. (Barrow.) }
Unawattee Creek	"	Franklin.....	
Webb's Creek.....	Hudson Fork, Br'd River.....	Banks.....	
Bear Creek.....	N. Fork, Broad River.....	Franklin	
Beaverdam Creek	Savannah River.....	Elbert	{ Point east of Southern R'y, 80 cu. ft. per sec. (Barrow) Stream has 9 mills and several good undeveloped shoals. (U. S. C.) }
Cold Water Creek.....	"	Elbert	
Lightwood Log Creek	"	Hart.....	{ Walker's mill, 4.5 cu. ft. per sec.; 20 ft. fall. (Barrow). Tallulah Falls. (See Power Table.) Toccoa Falls, 5.2 cu. ft. per sec.; 190 ft. fall. (Barrow & Locke.) Parker's mill, 333.7 cu. ft. per sec., normal. (C. O. Anderson.) }
Tugalo River	Tugalo River.....	Habersham	
Panther Creek	"	Rabun	
Tallulah River	"	"	
Toccoa Creek	"	"	{ Near Olayton, 3.7 cu. ft. per sec. At mouth, 80 cu. ft. per sec. (Barrow.) At mouth, 50 cu. ft. per sec., low water. (Barrow.) At mouth, 40.6 cu. ft. per sec., low water. (Barrow.) }
Persimmon Creek	Tallulah River	Rabun	
Chattooga River	Tugalo River	Rabun	
Stekoa Creek	Chatuga River	Rabun	
War Woman Creek	"	Rabun	{ At mouth, 50 cu. ft. per sec., low water. (Barrow.) At mouth, 40.6 cu. ft. per sec., low water. (Barrow.) }
Wildcat Creek	"	Rabun	
Tiger Creek	"	Rabun	



HIGH FALLS OF THE TOWALIGA, MONROE COUNTY.

SAVANNAH BASIN—WATER-POWERS

LOCATION OF WATER-POWER	POINT OF SECTION	Stage of Water	Cubic Feet per Second	Fall in Feet	Length of Shoal, In Feet	Gross H. P. ¹	Source of Information	REMARKS
TALLULAH RIVER								
Rabun County	Tallulah Falls	Normal	723.3	335.0	4,000	27,470	Anderson	
TUGALO RIVER								
Habersham County	Mouth of Tallulah River ..	Low Water	654.0	75.0	2½ m.	5,573	{ J. P. Carson, 1,750 cu. ft. per second. " " " "	{ Fall said to be over 70 ft. in 1½ miles. U. S. Census.)
Franklin County	Eastonolly Shoals .....	"	.....	4.0	2,640	.....	"
"	Striding Shoals .....	"	.....	2.0	2,640	.....	"
Hart County	Guest Shoal	"	290.0	17.0	5,280	560	10th U. S. Census	
"	Hatton Shoal	"	290.0	39.0	8,000	1,280	"	
BROAD RIVER								
Elbert County	Baker's Ferry	"	600.0	8.0	600	204	"	
"	Anthony's Shoals	"	600.0	70.0	6,600	4,772	"	
"	Smith Shoals	"	600.0	10.0	2,640	681	"	
SAVANNAH RIVER								
Hart County	McDaniel's Shoals .....	.....	768.6	30.0	5 m	2,600	"	{ Volume as given by U. S. Eng. J. P. Carson, 1,750 cu. ft. per second.
Elbert County	Ferrill's Ledge .....	.....	768.6	8.0	360	280	"	Vol. etc., 1,750 cu. ft. per sec.
"	Middleton's Shoals .....	.....	833.8	18.0	5,280	1,700	"	Vol. etc., 2,000. "
"	Gregg's Shoal .....	.....	833.8	14.0	5,280	1,325	"	Vol. etc., 2,100. "
"	Bowman's Ledge .....	.....	880.0	3.0	120	800	"	Vol. etc., 2,150. "
"	Cherokee Shoal .....	.....	880.0	9.0	2,640	900	"	Vol. etc., 2,400. "
"	Trotter's Shoal .....	.....	107.5	75.0	7 m	9,165	"	Vol. etc., 2,775
Lincoln County	Long Shoal .....	.....	1,800.0	35.0	7 m	7,250	"	
Columbia County	Blue Jacket Shoal .....	.....	2,166.6	10.0	600	2,350	"	
Richmond County	Augusta	L. Season Dry Yrs	2,400.0	50.0	Canal 7 miles	18,936	"	{ The city owns the water-power and factory sites. Mfg. Cos. buy sites and lease power.
"	Augusta	Max. with Storage	6,000.0	50.0	"	84,080	"	
"	{ Same with average head { attainable	L. Season Dry Yrs.	2,400.0	40.9	"	10,908	"	

¹Net H. P. = 80 per cent. of gross H. P.

SAVANNAH BASIN—UTILIZED POWER.

STREAM	COUNTY	KIND OF MILL	No. of Mills.	Total Fall Used	Total Net H. P. Used	REMARKS
Savannah River.....	Richmond	Miscellaneous.....	15	....	8,650	
" ".....	Lincoln	Flour and Grist.....	8	14	32	
" ".....	Elbert	" ".....	2	19	115	
Tributaries of Savannah R.....	Effingham	Sawmill.....	1	6	20	
" ".....	Burke	Flour and Grist.....	8	72	96	
" ".....	Richmond	" ".....	11	125	190	
" ".....	"	Sawmill.....	8	100	209	
" ".....	"	Cotton Factory.....	1	9	50	
" ".....	"	Woolen-mill.....	1	9	45	
Little River.....	Lincoln	Sawmill.....	3	24	45	
" ".....	"	Flour and Grist.....	4	30	60	
" ".....	McDuffie	" ".....	1	9	60	
" ".....	"	Gold Stamp-mill.....	1	8	12	
" ".....	Wilkes	Flour and Grist.....	1	8	8	
" ".....	Warren	" ".....	1	8	30	
" ".....	Greene	Saw and Grist.....	1	14	5	
Other Tributaries of Savan- nah River ".....	Columbia	Flour and Grist.....	5	69	91	
" ".....	"	Sawmill.....	1	10	25	
" ".....	McDuffie	Flour and Grist.....	7	127	152	
" ".....	Warren	" ".....	1	20	15	
" ".....	"	Sawmill.....	1	12	12	
Broad River & Tributaries.....	Oglethorpe	Flour and Grist.....	10	195	175	
" ".....	Madison	" ".....	10	145	281	
" ".....	"	Sawmill.....	5	61	64	
" ".....	Elbert	Flour and Grist.....	8	44	39	
" ".....	Franklin	" ".....	9	....	163	
" ".....	"	Sawmill.....	4	56	54	
" ".....	"	Cotton Gin.....	6	83	53	
" ".....	Banks	Sawmill.....	1	18	20	
" ".....	"	Flour and Grist.....	12	169	279	
Other Tributaries of Savan- nah ".....	Wilkes	" ".....	7	85	75	
" ".....	Elbert	" ".....	6	73	134	
" ".....	"	Sawmill.....	1	14	12	

SAVANNAH BASIN—UTILIZED POWER—Continued

STREAM	COUNTY	KIND OF MILL	No of Mills	Total Fall Used	Total Net H. P. Used	REMARKS
Other Tributaries to Savannah River	Hart.	Flour and Grist.	11	194	136	
"	"	Sawmill	1	14	15	
"	"	Cotton Gin.	8	99	50	
Tributaries of Tugalo River	"	Sawmill	1	30	10	
"	"	Flour and Grist	2	27	45	
"	"	Cotton Factory	1	26	20	
"	"	Wool Carder	1	20	44	
"	Habersham.	Flour and Grist	4	47	46	
"	"	Leather	1	16	6	
"	"	Sawmill	8	46	58	
"	"	Woolen-mill	1	....	6	
"	Rabun.	Sawmill	1	14	8	

OCKLOCKNEE AND SUWANNEE BASINS—UTILIZED POWER

Ocklocknee R. and Trib's	Colquitt	Flour and Grist.	8	16	30	
"	Decatur.	"	4	64	50	
"	"	Sawmill	1	6	12	
"	Thomas	Flour and Grist.	4	82	84	
Ocilla R. and Tributaries	"	"	4	60	50	
Tributaries of the Suwannee River	Berrien	Woolen-mill	1	12	12	
"	"	Flour and Grist.	10	82	145	
"	"	Sawmill	1	9	10	
"	Brooks	Woolen-mill	1	....	12	
"	"	Sawmill	1	10	10	
"	"	Flour and Grist.	7	43	54	
"	Olinch	"	1	7	15	
"	Echols	"	1	6	6	
"	"	Cotton Gin.	1	12	6	
"	Lowndes	Sawmill	1	10	10	
"	"	Flour and Grist.	8	80	77	
"	Wilcox.	"	1	6	4	

SOILS.

The soils of Georgia vary greatly in different regions and present diversities of character corresponding to the differences in composition of the underlying rocks from which they have been derived. With the exception of the alluvial deposits of streams, they are everywhere the result of the weathering of the country rock; and in almost any railroad cut in the hilly upland part of the State, the different stages of weathering and decay can be observed, from the perfectly formed soil at the top, through coarse-grained gravelly soil and partially decayed rock to the firm underlying material below. Such being the case, the classification of the soils will necessarily correspond with that of the different geological formations.

In the Paleozoic area the soils derived from those of the limestone beds, which do not carry a large amount of silicious matter, and from the calcareous shales, are reddish loamy soils, and are among the most fertile of any in the State.

Where a large amount of chert is present in the limestone, gray soils result, varying with locality in their fitness for agricultural purposes. The sandstones of the Paleozoic region form sandy soils, and the different shale formations give rise to a variety of soils, some, as mentioned above, that are quite fertile, and others that are sterile.

In the Crystalline area two varieties of soils are distinguishable. The first gives rise to the red clay lands and the other to the gray, gravelly, or sandy lands.

The red clay soils are derived from schists, gneisses and granitoid rocks containing ferro-magnesian minerals, yielding on decomposition hydrated ferric oxide of iron, which gives to the soil its deep-red or brownish-red stain.

The gray soils are coarser grained than the preceding and are derived from the disintegration of granites, and in some localities from gneisses, and grade into the finer grained red soils wherever complete chemical decomposition has succeeded mechanical disintegration.

Most of the soils of the Crystalline area where not naturally fertile respond well to fertilization, the clay subsoil that underlies the most of them preventing the leaching out of plant-food.

The soils of the coastal plain region have been derived principally from the Columbia and Lafayette formations, and are prevailing sandy or clayey sands or loams.

Their constitution varies according to locality from almost pure sand to the darkest brick-red loams of the Lafayette. At some places calca-



IRON ORE MINE, NEAR TAYLORSVILLE, POLK COUNTY, GA.

reous rocks underlying these formations outcrop, and at different points limestones and marls have an important influence on the character of the soil.

No detailed investigation from a geological standpoint has yet been made on the soils of the southern part of the State.

A paper on the Mineral Resources of Georgia read by Prof. S. W. McCallie before the International Mining Congress held at Boise City, Idaho, in the latter part of July, 1901, will form a fitting conclusion to this chapter on the Geology of Georgia.

All of the great divisions of geological history are represented in Georgia with the exception probably of the Jura-trias. The northern and central parts of the State known as the Crystalline area are made up largely of gneisses and schists, which are supposed to represent the southern extension of the old Archean continent. To the northeast of this ancient land surface and comprising the greater part of ten counties in the extreme northwestern part of the State, occur the Paleozoic rocks; while to the south, extending over an area of 30,000 square miles, are the wide-spread deposits of the Cretaceous and the Tertiary periods. A State thus endowed with such diversity of geological formations must necessarily possess extensive and varied mineral resources. In the discussion of these resources, many of which are in a large measure at present in an incipient stage of development, only those will be considered whose economic importance can not be questioned.

The red and the brown iron ores constitute one of the most important mineral resources here to be considered, and one that has been a continuous source of revenue to the State for more than half a century. These ores are confined mainly to the Paleozoic area of Northwest Georgia, where they occur in large quantities.

The brown iron ores, or more properly speaking, the limonites, are most abundant in Polk, Bartow and Floyd counties. Nevertheless, workable deposits are also to be found in every county in the northwestern part of the State with only one or two exceptions.

The brown iron ores are confined chiefly to two different geological horizons, viz., the Weisner quartzite, and the Knox dolomite, the former of Cambrian, and the latter of Silurian age. The Weisner quartzite, which corresponds to the Potsdam sandstone of New York, is an extensive deposit of mountain-making metamorphic sandstone, forming the eastern boundary of the Paleozoic rocks. At many points the formation has been subjected to intense pressure during the process of mountain-making, and as a result, its strata are frequently much folded and brecciated. Along the line where the dynamical forces have acted most energetically is a great displacement in the strata known as the Cartersville fault near which all of the main iron ore deposits of the Weisner quartzite are located. These ores, which always run high in metallic iron and low in sulphur and other impurities, often occur in well-defined fissure-veins, but generally they are found in the form of irregular de-

posits in the residual clays, or as thick sheets, or blankets, overlying the metamorphic sandstone. The fissure-veins vary from a few feet to several yards in width and frequently continue for a quarter of a mile or more in length. They always dip at a high angle and apparently extend to a great depth. The ore of these veins is generally more or less porous and is usually of an excellent quality.

The blanket deposits are not so plentiful as the residual or the fissure deposits; nevertheless they are of special economic interest on account of the large quantities of ore which they contain. These deposits in the extreme northeastern part of Bartow county, in what is known as the Sugar Hill district, often mantle the mountain side to the depth of many feet. One of the deposits of this district has been producing daily for the last few years from twenty to thirty cars of high grade ore, and yet there still remain large quantities of the ore in sight. It is questionable whether there are to be found anywhere in the south brown iron ore deposits which will surpass, or even equal in extent, the blanket deposits of the Weisner quartzite of Bartow county.

The brown iron ores of the Knox dolomite formation occur chiefly in the form of pockets or irregular deposits in the residual clays. These deposits are quite variable in size. Sometimes they produce only a few carloads of ore but generally they are far more extensive and cover a considerable area. Some of the individual deposits in the vicinity of Cedartown have been worked on an extensive scale for more than twenty years without exhausting the supply of ore. It is not an uncommon thing to find the deposits extending over six or eight acres, but in such cases the deposit is not equally rich in all parts. The depth to which the ores of the Knox dolomite formation extend, as well as its surface dimensions, is variable. In some instances the deposits are very superficial, extending only a few feet below the surface, while in other cases they have been worked to the depth of eighty feet or more without reaching their limit.

In addition to the above brown iron ore bearing formations there are two others, viz.: the Deaton limestone and the Fort Payne chert, which have also produced considerable ore. The ore from these formations is similar to the ore occurring in the Knox dolomite series though, as a general rule, it does not run as high in metallic iron.

The total amount of brown iron ore produced from these several deposits last year aggregated more than 400,000 tons, thus making Georgia the third in the list of brown iron ore producing States in the south.

The Red Iron Ores.—The red, or fossil, iron ores of Georgia are confined chiefly to three counties in the extreme northwestern part of the State. These ores occur in what is known as the Rockwood formation, which is the northern extension of the Red Mountain, or the Clinton iron ore bearing series of Alabama. Stratigraphically, the Rockwood formation occupies the same position in the geological scale as the fossil iron ore bearing rocks of New York and Pennsylvania.

The Rockwood formation in Georgia is made up of shales, sandstones, and thin-bedded limestones with from one to three beds of fossil iron ore. The formation, though not necessarily ridge forming itself, always out-

crops along the side or at the base of the mountains and ridges. It is exposed at the base of Sand, Lookout, Pigeon and Dirt Seller's mountains, and also along the slopes of Taylor's Ridge, where it attains a total thickness of several hundred feet.

The workable iron ore is found usually near the center of the Rockwood formation, where it occurs in continuous beds varying from a few inches to several feet in thickness. Each of the beds, which usually dip at a low angle, generally carries two varieties of ore, viz.: the soft ore and the hard ore. The soft ore, which forms the weathered part of the bed, rarely ever extends to a depth of more than ten or fifteen feet below the surface. It differs from the hard ore mainly in having little or no lime present, and as a consequence, always runs higher in metallic iron than the hard ore. The relative chemical composition of the soft and the hard ore is shown by the following analyses:

Hard Ore.—Metallic iron, 32.19; lime, 23.19; phos., 0.804.

Soft Ore.—Metallic iron, 59.00; silica, 9.11; phos., .092.

Some idea may be had as to the abundance of the red fossil iron ores of Georgia, when it is stated that the aggregate length of the outcroppings of the beds, which average more than two feet in thickness, is about 150 miles, and that in places the ore can be economically mined to the depth of more than 200 feet.

The output of the red iron ores of Georgia last year was not so great as that of the brown iron ores. Nevertheless, should the price warrant it, the output of these ores could be increased to meet almost any demand.

Coal.—The coal measures of Georgia which occur in the northwestern part of the State, form the northern extension of the Warrior Coal Field of Alabama. They are confined chiefly to Sand and Lookout mountains in Dade, Walker, and Chattooga counties, where they cover a total area of about 200 square miles. The coal formation of Georgia, as elsewhere in the great Appalachian coal fields, is divided into upper and lower measures. The upper measures are best developed on Lookout mountain, in the vicinity of Durham coal mine, where they attain a maximum thickness of about 900 feet. This division of the coal formation carries seven different coal seams, but only one is worked at present.

The lower coal measures are not so thick by many feet as the upper. However, they carry a greater number of workable coal seams. In the vicinity of Cole City, on Sand mountain, as many as three different seams have been worked in the lower measures more or less extensively. In addition to the three workable coal seams here mentioned, the lower measures contain two other seams which are probably also workable in places.

The coal obtained from both coal measures is an excellent quality of bituminous coal, well suited for coking and steam purposes. At present, there are three coal mines being operated in the State, two on Lookout, and one on Sand mountain, with a total output of about 14,000 tons per day, the greater part of which is used for coking purposes. Two of the mines, here referred to, are in the upper coal measures of Lookout, and the other is in the lower measures of Sand mountain. The mines on the

latter mountain have been worked almost continuously for more than half a century, and were among the first coal mines opened south of the Ohio river.

Manganese.—The manganese ores, like the brown iron ores, are confined chiefly to Bartow, Floyd and Polk counties. The largest and most productive deposits are found in Bartow county, in the vicinity of Cartersville, where the ores occur as irregular deposits in the residual clays derived from the Knox dolomite and the Weisner quartzite. The ores are usually in the form of nodular concretions, varying from a fraction of an inch to a foot or more in diameter. In places these concretions become so abundant that they form beds of considerable thickness. Deposits of this character which have been extensively worked, occur in the vicinity of Cave Spring, Polk county.

The manganese deposits of Georgia have been worked continuously for many years. During their early workings the ores were shipped to England, but at present, they find a ready market at home, where they are used in the manufacture of steel and for bleaching purposes. In 1898, Georgia produced nearly 7,000 tons of manganese ore, which was approximately one half of the manganese produced in the United States. With the exception, probably, of Virginia, Georgia easily stands first in the list of manganese producing States in the Union.

Ochre.—Ochre deposits of commercial value are found at a number of points throughout northwest Georgia, where they are always more or less intimately associated with the brown iron ores. The most extensive deposits are confined to the Weisner quartzite in Bartow county, near Cartersville. These deposits occur mostly along the western margin of the quartzite, where it has been much crushed and broken. According to Dr. C. W. Hayes, of the United States Geological Survey, the ochre forms a series of irregular branching veins, which intersect the fractured quartzite in all conceivable directions. At some points the veins become greatly enlarged and contain large quantities of excellent ore. Deposits of this character, which have been worked for some years, are to be seen at the eastern end of the county bridge across the Etowah river, near Emerson; and also at a number of points along the western margin of the Weisner quartzite north of that point. The ochre of these deposits, which is really only a pulverulent form of brown iron ore, is quite free from impurities, and well suited for making linoleum and paint.

The output from the ochre mines in the Cartersville district last year was nearly 4,000 tons, about one-fourth of the ochre output of the United States. The greater part of the ochre now being mined in Bartow county is said to be shipped to England, where it is used in the manufacture of linoleum. In addition to the above named ochre, which is known as yellow ochre, Georgia also produces a considerable amount of red ochre, which is the pulverized, or ground red fossil iron ore, obtained chiefly from Walker county.

Bauxite.—Bauxite, a hydrate of alumina, first discovered in America near Rome Ga., in 1887, is a clay-like mineral used principally in the manufacture of alum and the metal aluminium. The Georgia deposits



MINING ORE BY USE OF THE STEAM-SHOVEL, NEAR CEDARTOWN, POLK COUNTY, GA.

of this mineral are found mainly in Floyd, Polk, and Bartow counties, where they occur in more or less extensive pockets associated with the residual clays of the Knox dolomite. The size of these deposits, like those of the brown iron ores, is quite variable. In some instances they have been known to have produced several thousand tons, but as a rule the deposits are not so extensive. The physical appearance of the mineral bauxite, which varies from 30 to 70 per cent. alumina, is often amorphous, resembling kaolin, but generally it has a concretionary or oolitic structure.

The first bauxite mined in the United States was from Hermitage, Floyd county, in 1889. Subsequent to this date, other mines were opened in Floyd, Bartow and Polk counties, so that in a comparatively short time the mining of bauxite in Georgia became a very important and lucrative industry.

The annual output from the Georgia bauxite mines in the last few years has varied from 1,000 to 7,000 tons, the greater part of which has been shipped to Philadelphia, where it is used in the manufacture of alum. Previous to the opening of the bauxite mines of Arkansas in 1899, Georgia and Alabama produced all the bauxite mined in America.

Corundum.—Corundum was first discovered in Georgia on Laurel Creek, Rabun county, about 1871. This mineral has since been found in greater or less deposits in a number of counties throughout the northern part of the State. It occurs associated with peridotites, and other basic igneous rocks in the form of irregular veins and pockets. The corundum found in Georgia is usually pink, gray or blue. It is rarely transparent and as a consequence the gem sapphire or ruby is seldom met with. In a few instances these gems are reported to have been found, but they are probably of rare occurrence. The commercial value of the Georgia corundum may therefore be said to depend upon its use in the arts as an abrasive material.

Between 1880 and 1893, the corundum mines of the Laurel creek district were extensively worked and became one of the main sources of supply to the corundum trade of the country. About the same time, corundum was successfully mined at Track Rock, Union county, and favorable prospects were later exposed in Habersham and other counties.

In recent years the corundum mines of Georgia have remained inactive, due chiefly to the low price of corundum, and not as might be supposed to the exhaustion of the deposits.

Asbestos.—For the last few years the chief supply of asbestos mined in the United States has been obtained from Georgia. The mine supplying this material is located on Sal mountain, White county, in the northern part of the State. Asbestos, like corundum, is always associated with peridotites and other basic rocks. It exists in many localities in the northern part of the State but at present it is worked only at the above named mine. The asbestos of Georgia has never been investigated, and as a result but little is known of the extent and commercial value of the deposits.

Marbles.—Previous to 1884, the marbles of Georgia were practically

unknown as building and ornamental stones, but at present the output of the quarries exceeds that of any State in the Union, with the exception of Vermont.

The most valuable marbles of Georgia are those of the Crystalline area confined to Pickens, Cherokee, Gilmer and Fannin counties. These marbles occur in a narrow belt which runs parallel to the Atlanta, Knoxville and Northern R. R., from near Canton, Cherokee county, to the Georgia-North Carolina State line, a distance of more than sixty miles. The main marble industry of the State is located in the vicinity of Tate, Pickens county, just north of the southern terminus of the belt where the deposit attains a thickness of nearly 200 feet.

The Pickens county marble has a coarse texture but admits of a very fine polish and is admirably suited both for building and ornamental purposes. In color the stone varies from white to almost black. A flesh-colored variety is also found in considerable abundance. The physical and chemical properties, as shown by the numerous tests made by the State Geological Survey, demonstrate that its durability equals or exceeds that of any other marble now being put upon the market. The stone is remarkably free from fissures and seams, so that monoliths suitable for huge columns can be quarried with ease.

At present seven different marble quarries, having an aggregate annual output of several hundred thousand cubic feet of stone, are being operated in Pickens county. The product of these quarries is shipped to nearly every State in the Union, where it is used in the construction and decoration of some of the most costly buildings. The State capitols of Minnesota and Rhode Island; the United States Government Building, Boston; St. Luke's Hospital, New York; and the Corcoran Art Gallery, Washington, with numerous other handsome buildings throughout the United States are constructed wholly or in part of the Georgia marble.

In addition to the marbles here described there are also valuable deposits to be found in Whitfield county. These marbles belong to the same deposits that traverse East Tennessee and are extensively worked in the vicinity of Knoxville. The stone has a dark chocolate or light gray color and a rather fine texture. The light gray variety which is always quite compact and highly Crystalline, is traversed by dark zigzag lines that give to the polished surface a very pleasing effect. The Whitfield county marbles are well suited for building material, but they have not yet received the attention which their economic importance demands.

Granites.—The granites of Georgia, together with the gneisses, constitute the most extensive and important building and ornamental stones in the State. They occur in inexhaustible quantities and are profusely distributed throughout the Crystalline area. One of the most interesting and probably the largest granite mass in the world is that of Stone Mountain, located only a few miles northeast of Atlanta. This mountain whose barren summit attains an altitude of several hundred feet above the surrounding country, has long been the seat of a very important granite industry. The stone obtained from these quarries is a light-colored muscovite granite possessing remarkable strength and is quite free from all

chemical and physical defects. The stone has extensive use as a building material, and is also largely employed in street improvement. There is likely no granite in the south more widely known and more generally used than that furnished by the Stone Mountain quarries. It not only has an extensive local use, but much of it is shipped beyond the borders of the State.

Another granite, or rather a granitoid gneiss, of almost as much economic importance as the Stone Mountain granite itself, is the Lithonia gneiss. This stone, which differs chiefly from the Stone Mountain granite in being laminated, covers a considerable area in the eastern part of DeKalb and the contiguous parts of Rockdale and Gwinnett counties. The Lithonia quarries are very extensive and furnish large quantities of stone for street improvement as well as for general building purposes. Granites and granitoid gneisses similar to the above are found in many localities in North Georgia, but only at a few points have they been quarried to any extent.

In addition to the granites and granitoid gneisses here named there are other granites of superior quality used for monumental stone. Some of the granites of this character which in the last few years have become quite popular as decorative stone are those obtained from the Elberton, the Oglesby, the Lexington, and the Meriwether quarries. These monumental granites are fine-grained biotite granites unusually free from injurious minerals and admitting of a very brilliant polish. They have but few equals, if any superiors in the United States as a decorative stone, and it is only a question of time when the Georgia monumental granite industry will be of very great commercial value to the State.

Sandstone.—Sandstone has been quarried to a considerable extent in Catoosa county near Graysville. The stone, which is of Silurian age, has a dark-brown color and resembles very closely the brown sandstone of the Connecticut valley. It makes a beautiful building-stone and appears to be quite durable. This stone is found in great abundance in Taylor's Ridge, White Oak, Horn, and other mountains in the northeastern part of the State. Carboniferous sandstones of a light color and well adapted for building purposes occur in Lookout, Sand and Pigeon mountains.

Serpentine.—This is one of the most beautiful decorative stones found in the State. It occurs in workable quantities in Cherokee county, near Holly Springs, where it was quarried to a limited extent a few years ago. The stone, though difficult to work, admits of an excellent polish and is very desirable for ornamental purposes. It is of a dark-green color, mottled and streaked with white and black. The larger part of the stone obtained from the Holly Springs quarry is reported to have been shipped to Chicago, where it is used for interior decoration. Georgia serpentine used for similar purposes may be seen in the Prudential building of Atlanta.

Limestone.—Silurian and carboniferous limestones suitable for lime, fluxing and building materials, exist in great abundance in northwest Georgia. The most extensive of these calcareous formations is the Knox dolomite, a magnesian limestone of great thickness. This formation fur-

nishes much of the lime used in the State, as well as a large amount of stone for general building purposes. The different beds of the formation vary greatly in texture and chemical composition, so that almost any variety of stone can be procured. Other calcareous formations of scarcely less commercial importance are the Bangor and the Chickamauga limestones. The latter stone in the last few years has had an extensive use in constructing the foundations for monuments in the Chickamauga National Park. The stone is also of considerable local importance as a building material.

Cement Rock.—Hydraulic cement of good quality has been manufactured in Georgia since 1845. The location of this industry is at Cement, on the Western & Atlantic Railroad, in the western part of Bartow county. The cement rock found in this district is an impure magnesian limestone belonging probably to the lower division of the Knox dolomite formation. It occurs in beds several feet in thickness, intercalated with the purer limestones. The cement manufactured from this stone is slow setting, but it forms a bond of great strength and hardness. Maj. M. T. Singleton, late Assistant United States Engineer, in speaking of this cement says: "My experience with the cement has been entirely satisfactory. In fact, for general purposes, and especially for heavy cut stone masonry, I prefer it to any cement I have used."

Hydraulic limestone of good quality is reported at numerous other points throughout the Paleozoic area of North Georgia, but the extent and quality of the stone has not yet been investigated.

Slate.—Slate suitable for roofing purposes occurs at a number of points in northwest Georgia along the line of contact of the Paleozoic and Crystalline areas. The most important deposits are those of the Rockmart district in the eastern part of Polk county, where slate has been mined on a more or less extensive scale for a great many years. The Rockmart slate, which is of Silurian age, has a deep blue-black color and a fine, even texture. It splits with a smooth surface into thin slabs and is quite free from pyrites and other impurities. The chemical analysis of the Rockmart slate shows it to be a first-class stone for roofing purposes.

The only slate quarries now operated in Georgia are those in the vicinity of Rockmart. A few years ago a small amount of slate was quarried near Cedartown, but these quarries are now abandoned. The slate at the latter quarries belongs to the same formation as the Rockmart and is of similar character. The slate now being quarried in the Rockmart district is quite generally used throughout Georgia and a number of other Southern States, where it has a high reputation as a roofing slate.

Clays.—The clays of Georgia are abundant and widely distributed. There is scarcely a geological formation of any extent that does not furnish clays of commercial value. Residual and alluvial clays, well adapted to the manufacture of brick and the cheaper grades of crockery, abound in every county in the northern part of the State. Associated with these impure clays are often found pockets or irregular deposits of porcelain and fire clays of greater or less extent. The latter clays are



CORUNDUM MINE.

confined chiefly to the Knox dolomite formation of northwest Georgia, but they are also occasionally met with in the Crystalline area further to the east and south.

The most valuable and extensive clay deposits in the State are those of sedimentary origin belonging to the Cretaceous formation of central Georgia. They occur in a belt several miles wide, extending from Columbus to Augusta. The Cretaceous clays differ greatly in their physical and chemical properties, so that almost any desired variety may be found. Some of these clays have an extensive use in the manufacture of wall-paper, while other varieties are used in making porcelain, terra-cotta, tiling, sewer-pipe, pottery, etc. Besides the varieties of clays here mentioned, fire-clay also occurs in the Cretaceous formation in commercial quantities. Dr. George E. Ladd, Director of the Missouri School of Mines, in speaking of the Cretaceous fire-clays of Georgia, says: "Some of these kaolins suitable for fire-clays are more refractory than any of the noted fire-clays of the United States."

The clay industry of Georgia, although in its infancy, has already become well established. The value of the clay product of the State last year exceeded that of any of the Southern States, with the exception of West Virginia and Maryland.

Gold.—Gold has been mined in Georgia for nearly three quarters of a century. The first discovery of the precious metal within the limits of the State was made on Duke's creek, White county, in 1829. Previous to the discovery of gold in California, the mines of Georgia furnished the greater part of the gold produced in the United States. As early as 1838, the output of the mines of the State had become so important that the United States government found it necessary to establish a mint at Dahlonega, the center of the main gold-mining district.

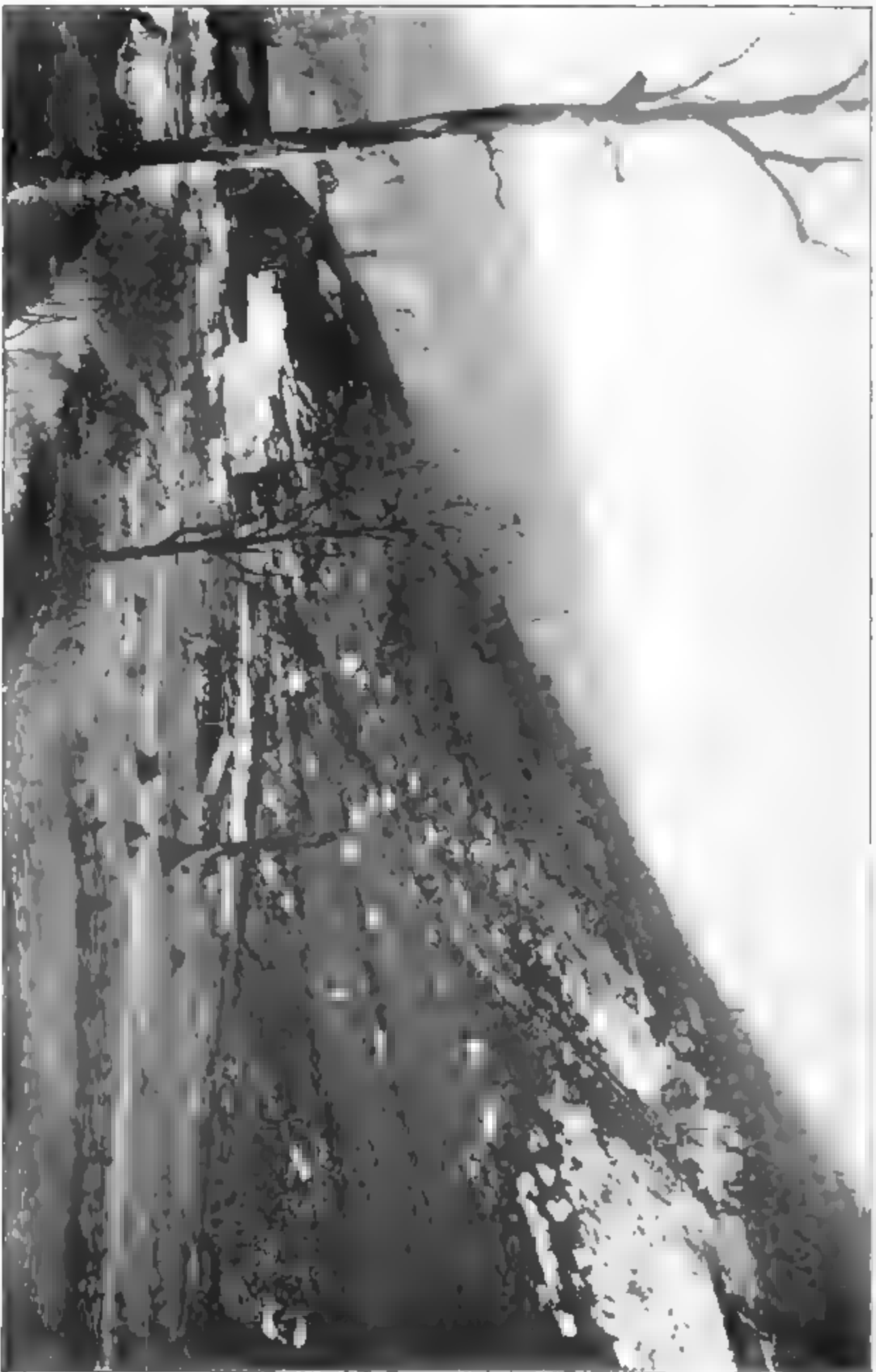
The gold deposits of Georgia belong to the Appalachian gold fields, an auriferous belt extending from Nova Scotia to Alabama. The belt, which consists of highly Crystalline rocks, probably of Archean age, varies in width from 10 to 75 miles. In Georgia, the belt breaks up into a number of minor parallel belts, having a northeast-southwest trend. The most important of these are the Dahlonega and Hall county belts. The former, which takes its name from Dahlonega, the county seat of Lumpkin county, is the most important. This belt enters Georgia from North Carolina in the northwestern part of Rabun county, where valuable placer deposits have been worked at the Smith and the Moore Girls' mines. Further to the southwest in White county, the belt increases in width and the mines at the same time become more numerous. As the auriferous belt enters Lumpkin county it again increases in size, reaching its greatest development in the vicinity of Dahlonega. In Dawson county the Dahlonega gold belt becomes more or less broken up, but upon entering Cherokee county it again regains its economic importance and continues with but few interruptions through Bartow, Cobb, Paulding and Haralson counties to the Georgia-Alabama State line. The entire length of the Dahlonega gold belt thus outlined is about 150 miles, while its width varies from 1 to 5 miles.

The Hall county gold belt lies some 10 miles east of the Dahlonega belt and runs more or less parallel with it for more than 100 miles, stopping short in Fulton county, only about 10 miles north of Atlanta. A third belt, which includes the Acworth, the Villa Rica and the Bonner mines, traverses Cobb, Paulding and Carroll counties. This belt is best developed in the neighborhood of Villa Rica, where in former years much gold was mined. Another belt, including some very important mines, traverses Lincoln, Columbia, McDuffie and Warren counties in the eastern part of the State. Beyond the limits of the belts here mentioned are found a number of isolated localities where gold occurs in paying quantities. Such isolated deposits as here referred to are found in Towns, Union, Fannin, Gilmer, Meriwether, and other counties in the northern part of the State.

The individual auriferous belts of Georgia are usually made up of a great number of veins or ore bodies running parallel to each other and conforming in dip and strike to the gneisses and schists, the country rock. They vary in thickness from a fraction of an inch to several feet or rods, and often continue without interruption for long distances. In places the veins, which consist largely of quartz, become greatly extended, forming huge shoots of excellent ore. A vein of this character at the Creighton mine in Cherokee county has been worked continuously for years and has produced large quantities of gold. Ore bodies of somewhat similar nature are quite abundant in the Dahlonega district where in the last two years extensive developments have been carried on which, no doubt, will soon result in a large increase of the gold output of the State.

Copper.—Previous to the Civil War copper was successfully mined in Fannin and Cherokee counties in the northern part of the State. The deposits of the former county are located near the Georgia-Tennessee line, and from the southern extension of the deposits so largely worked just across the State line in the Ducktown district. One of the Fannin county mines, known as the Mobile mine, at one time was quite extensively worked and is said to have produced a large amount of high-grade ore. The copper deposits of Fannin county, although practically undeveloped at present, are thought to be of considerable economic importance. Other copper deposits which, from time to time, have excited considerable local interest, occur in Fulton, Paulding, Lumpkin, Haralson, Lincoln, and other counties in North Georgia. The most important copper ore met with in the counties here named is chalcopyrite (copper pyrites). It occurs mostly in irregular veins associated with schists and highly metamorphic slates.

Pyrite.—Pyrite, an iron sulphide employed in the manufacture of sulphuric acid, is widely distributed throughout Georgia, but only in a few localities has it been found in sufficient abundance to be of commercial importance. Probably one of the most important deposits of this mineral known at present in the State, occurs in the eastern part of Lumpkin county, on the Chestatee river, about six miles northeast of Dahlonega. This deposit is quite extensive and the ore is of good quality. The com-



SOUTHERN MARBLE YARD AND QUARRY, PICKENS COUNTY.

mercial value of the deposit has long been known, but the great expense of hauling the ore by wagon to Gainesville, the nearest railway station, twenty miles distant, renders the mining of the ore unprofitable. Other deposits of pyrite of considerable promise occur in Paulding and Haralson counties. The deposit in Paulding county was worked to some extent a few years ago and the ore was shipped to Atlanta where it was used in the manufacture of sulphuric acid. This ore, which runs high in sulphur, is said to carry from four to five per cent. of copper and a small amount of gold.

No systematic study has yet been made of the pyrite deposits of the State, and as a consequence little is known of their extent and commercial importance.

Soapstone.—Soapstone, or talc, has been mined to a limited extent in Murray and Fannin counties. It also occurs in Cherokee and in Gilmer counties, and is reported in other localities in North Georgia. The soapstone mines of Fannin county, which have been worked for some years, are located at Mineral Bluff, only a short distance south of the Georgia-North Carolina State line. This deposit is probably the southern extension of the North Carolina deposit which is extensively worked just north of the State line. The Fannin county soapstone is compact and of a dark gray or blue color. It occurs in veins varying from a few inches to a yard or more in thickness. The Murray county soapstones, which are found on Fort mountain, a few miles east of Spring Place, are of similar nature.

Mica.—This mineral is quite generally distributed throughout the Crystalline area of North Georgia. It usually occurs in veins associated with pegmatites and coarse-grained granites. The veins are often of large size, and occasionally contain mica crystals eighteen inches or more in diameter. Many of the mica deposits of the State have been prospected to a limited extent, but no systematic mining of any importance has been attempted. There is little doubt, however, that the mica deposits of Georgia are of commercial importance and demand more attention than they have heretofore received.

Graphite.—Both massive and foliated varieties of this mineral occur in considerable quantities associated with the highly metamorphic slates and schists along the western margin of the Crystalline area. It is quite abundant in the neighborhood of Emerson, Bartow county, where it is now mined and used in the crude state as a filler for commercial fertilizers. Promising prospects of graphite are also reported to occur in Pickens, Elbert, Hall, Madison, Douglas and Cobb counties. The Pickens county deposit is at present being developed and it is thought that in a short time it will become an active producer.

Marls.—Marls of good quality abound throughout the cretaceous and tertiary formations of South Georgia. There is probably no county in the southern part of the State which does not possess marl deposits of more or less agricultural value. They are well exposed along the Chattahoochee and Flint rivers, as well as along other streams of South Georgia. In addition to the common calcareous or shell marl, green

sand marls are also plentiful. The latter are especially well developed along the Chattahoochee river south of Columbus, where they often form beds many feet in thickness. Analyses of these greenlands show that they carry a considerable amount of phosphoric acid and potash, two of the most important plant-foods. The use of the Georgia marls as a natural fertilizer has so far been quite limited, but in all cases where they have been given a fair test the result has been entirely satisfactory. Associated with the marls in the extreme southern part of the State frequently occur deposits of phosphate of limited extent. A deposit of this character was worked some years ago in Thomas county, near Boston, but the phosphate was not of sufficient abundance to be of commercial value.

Tripoli.—A light, porous, silicious stone occurring in Murray, Chattooga, and other counties in Northwest Georgia has locally been known for some years as tripoli. The material, although quite different in origin from tripoli, has a similar use in the arts. The so-called Georgia tripoli, is a residual product derived from certain impure silicious beds of the Knox dolomite formation. The stone, which is usually found associated with chert, is quite porous and is easily pulverized into an exceedingly fine grit or polishing powder. A small amount of this material is at present being mined in Chattooga county, and is used by an Atlanta firm in the manufacture of polishing-soap.

Sand.—Sand suitable for building material is widely distributed throughout the State. In North Georgia it occurs chiefly as alluvial deposits along the numerous streams, while in the southern part of the State it is found in stratified beds often of wide extent. In addition to that used for general architectural purposes, sand well adapted for moulding and glass-making also occurs. The pure sands are confined mainly to the cretaceous deposits of South Georgia, where they are frequently intercalated with beds of pure kaolin.

Road Materials.—There is probably no State in the South that has a greater variety of road materials than Georgia. The supply is inexhaustible and of the best quality. Besides the limestones, granites, and gneisses, heretofore spoken of, trap, diorite, chert, and gravel abound in great quantities.

Mineral Waters.—The number of mineral springs in Georgia to which public attention has been directed on account of the medicinal properties of their waters is very large. There is scarcely a county in the northern part of the State which does not possess one or more of these springs of greater or less repute. Many of them are so far only of local interest, but in some instances they have a national reputation, and are a source of much profit to their owners.

The commercial value of the mineral waters of Georgia in the last few years has exceeded that of any other Southern State with the exception of Virginia. The main supply of these waters now put upon the market is shipped from Lithia and Austell, a noted mineral water district on the Southern Railway, twenty miles west of Atlanta. The waters shipped from the Lithia-Austell district are among the best lithia waters found in the country. Their curative virtues are widely known and they are



GEORGIA MARRIE WORKS, TATE, G.A.

now shipped to all parts of the south in large quantities. Other springs having an excellent local reputation occur in North Georgia, but only in a few instances is the water put upon the market.

Besides the minerals above described there are many others found in Georgia which, at some future time, will probably become a source of revenue to the State. Among the most important of these may be mentioned silver, lead, zinc, baryta, gypsum, etc.

The annual output of the mineral products of Georgia is shown by the following table:

Iron Ores	\$ 578,526 00
Coal	450,000 00
Manganese	60,201 00
Ochre	73,095 00
Bauxite	35,274 00
Asbestos	10,300 00
Marble	812,070 00
Granites	790,000 00
Sandstone	2,000 00
Limestone and Lime	125,000 00
Cement-Rock	75,000 00
Slate	13,125 00
Clays—Brick, Pottery, &c	1,062,213 00
Gold	129,246 00
Soapstone	4,054 00
Graphite	12,000 00
Tripoli	500 00
Sand	200,000 00
Road Material and Ballast	350,000 00
Mineral Waters	42,000 00
Total	\$4,824,604 00"

CHAPTER IV.

SOILS OF GEORGIA.

The soils of Georgia, from a geological standpoint, were partially discussed in the last chapter. We shall now endeavor to look at them from the point of view of the argiculturist.

NORTHWEST GEORGIA.

The northwestern section of the State presents a variety of soils; as a brown and red loam; silicious soils of the ridges of a grayish-hue; the sandy soils of table or mountain lands, either gray or yellow, and more or less gravelly; the soil of the flatwoods; and the alluvial or bottom lands adjacent to streams. On the eastern and western sides of this section soils of a brown calcareous loam, belonging to the blue limestone area, prevail, while in the central parts is found a red calcareous loam of the rotten limestone area. Lands that have been in cultivation for thirty years will yield from thirty to fifty bushels of corn to the acre. By merely planting in clover or peas and turning the crop under without fertilization, the farmer can make these lands produce from ten to twenty bushels of wheat to the acre. They have been cultivated in cotton to only a limited extent, but will, under ordinary cultivation in Floyd and Polk counties, produce eight hundred pounds of seed cotton to the acre. Under the best methods the production can be greatly increased. These lands generally lie well. They are apt to wash when hilly, but this can be prevented by a good system of terracing. Very little cotton is grown to the north of Floyd county. The timber is large, consisting chiefly of red, spanish, and white oak, hickory, poplar, sugar-maple, post-oak, cedar, and a mixture of other varieties. The brown loams vary from light to almost black, while the red loams are of a dark red color with red subsoil.

Subcarboniferous brown loam lands consist of limestones, arenaceous and silicious shales. They are generally rolling, but nearly level where the valleys are broad. They have a brown, calcareous, sandy soil, with enough clay to make them sufficiently retentive, and admit of good drainage even when nearly level. Lands of this character are found in West Armuchee valley in Walker county, Sugar valley in Gordon, Dirttown

valley in Chattooga, and Texas Valley in Floyd, about twelve miles northwest of Rome, and in much more of the country west of the Coosa in Floyd county. Not only do corn, wheat, oats and all the grasses and other forage plants do well, but these are also the best cotton uplands in this part of Georgia, yielding often without fertilizers from 1,000 to 1,200 pounds of seed cotton to the acre, and under the most scientific farming going far beyond that.

In sections of Northwest Georgia there occur lands in belts of from two to three miles in width, which are underlaid by a series of shales and limestones of about 2,500 feet in thickness, known as Knox shales. Nearly all this area consists of an orange, or light colored clayey soil. The lands are rolling, or nearly level, and have a good drainage. After having been steadily worked for thirty or more years under the old exhaustive methods, with almost nothing returned to the soil for improvement, they will produce, fairly well, wheat, oats, and corn. In the forests are found the usual timbers of this section with some dogwood and pine. Clover and all the grasses do well.

Gray gravelly lands, with a soil varying in color from light to dark gray, are also found in this section. Some of these gravelly lands have a good clay subsoil, and are then of a dark brown, or red color. Those nearest the valley lands are the most highly esteemed. They were once regarded as poor and are in great part covered with original forests. The timber is about the same as already described, except that in broad belts of nearly level lands the short-leaf pine is the prevailing growth. But taking the whole area of the gravelly lands, oak predominates.

Instead of being the poor lands that they were formerly regarded, they have been found to give a better return for manures than the richer valley lands. They are profitable for cotton, and with the use of fertilizers will yield 1,200 pounds to the acre. Fruit trees here are healthy and long-lived. The tops and slopes of the ridges are less subject to late spring frosts than the lower lands.

The table-lands from 1,000 to 1,200 feet above the valleys are gray or yellow, and more or less gravelly, or rocky. They are found on Sand Mountain, in Dade county, and on Lookout Mountain, in Dade, Walker, and Chattooga counties. They are well adapted to fruit culture and produce a great variety of vegetables. The daily range of the thermometer is fifty per cent. less than in the valleys, and yet the daily minimum temperature is rarely more than two or three degrees less. The timber is of medium size. A good grass covers the surface nearly everywhere, affording excellent pasturage for stock.

The most extensive area of what is known as *flatwood lands* is near

the Oostanaula and Coosa rivers, in Gordon, Floyd, and Polk counties, and in a belt of hills in the southern part of Murray county, extending southward nearly across the county of Gordon. They are also found in Catoosa in a narrow belt extending southward into Whitfield. These flatwoods abound in short-leaf pine, post and red oaks.

The alluvial soil of the valleys of the Oostanaula, Etowah and Coosa rivers, fertile with the débris of ages, is capable of producing the finest yields of corn, wheat, oats, rye, barley, buckwheat, cow-peas, clover, timothy, orchard grass, red top, in fact, all the most useful hay crops.

Near the city of Rome forty acres planted in clover, which averaged when mature, three feet in height, have been known to produce in one season 200 tons of hay, or five tons to the acre. This shows what can be done on this line. The clover crop may be cut three times annually.

The finest grade of upland cotton grown in America is produced on this soil, and is considered in Liverpool the best of its variety. All this is true, also, of the creek bottom lands. The higher or table-lands of Northwest Georgia are somewhat less fertile, but better adapted to the growing of such fruits as peaches, plums, pears, quinces, cherries, and all kinds of berries. The best apples grow on the lower lands, where large, magnificent old trees grow to perfection. On the mountain tops and slopes, all the varieties of grapes that grow east of the Rockies flourish and give abundant yield. On these heights the frost seldom kills the bud, or nips the bloom of the peach. Often, when the lower lands have little or no fruit, these sun-kissed hills smile in plenty and gladden the heart of man.

In Northwest Georgia can be found almost every species of wood known in the Southern States. The oaks and pines predominate. Of the former, there are six varieties, red, white, mountain or chestnut, black, water and post-oak; and of pine there are two varieties, long and short-leaf. Thousands of acres of these valuable timbers can still be found, and can be bought at reasonable prices. There are also found poplar, ash, beech, elm, chestnut, hickory, maple, walnut, iron-wood, sugar berry, sycamore, sweet-gum, black-gum, dogwood, persimmon, sassafras, wild cherry, redbud, warhoo and cedar. Many of these are found in large quantities and can be utilized in the manufacture of furniture and hardwood finish for dwellings. The oaks and pines are for the most part used in buildings, furniture, and in the manufacture of farming utensils, wagons, etc. Large quantities of the oak and pine are annually shipped.

The indigenous grasses of this section are: Bermuda, Johnson, crab, perennial Paspalum, and annual or drop-seed Paspalum. These all make splendid pasturage and the best of hay.



MARBLE QUARRY SCENE, PICKENS COUNTY.



SOILS OF MIDDLE AND NORTHEAST GEORGIA.

The red hills of Georgia are familiar to all who have traveled through these sections by rail or wagon-road.

In the phrase *red lands* are included both red sandy and red clayey soils. The decomposition of hornblende rocks form a red clayey soil, which, though more or less sandy for a few inches, has a deep red-clay subsoil. The color and character of the soil varies of course in proportion to the hornblende and other minerals associated in the rocks. If biotite mica, which contains much iron, is present to any great extent in the soil, its decomposition produces a deep mulatto, or sometimes red soil similar to that from hornblende rocks, but usually of a lighter character. Though the surface of the red land country is rolling and often quite hilly with few level areas, very little is too broken for cultivation. The forest trees of these lands are red or Spanish oak, white and post-oaks, hickory, chestnut, dogwood, and, in the lowlands of some of the counties, short-leaf pine, poplar, ash, walnut, cherry and buckeye. There is more hickory and less pine than on gray sandy land. Black-jack is interspersed with these. Except in the more southern counties these lands are considered best for small grains, though about one-third part of those under cultivation is devoted to cotton.

Where *gray, sandy, gravelly land* occurs, though much of the surface is more or less rolling and hilly, there are broad level areas on the ridges and in the valleys. Except in the more mountainous districts the slopes of the hills and ridges are so gradual as not to interfere with their successful cultivation. Though their light, sandy nature makes them liable, when under cultivation, to wash into gullies and flood the lowlands with sand, such damage can be prevented by the prevailing method of hill-side ditching or terracing. These gray sandy soils are frequently colored dark for an inch or two with decayed vegetation. Then from the intermixture of the dark soil and the yellow, clayey subsoil there is obtained what is commonly called a mulatto soil. These lands are considered better than the red clays for cotton, because under favorable conditions they are more productive. They are also more easily tilled, although often loose quartz rocks, or stones, are so abundant that they must be removed before the ground can be broken up. From one half to two thirds of these lands under cultivation are devoted to cotton.

In the *granitic lands* the soil is often a coarse, gray, or gravelly sand, from three to six inches deep, with a more or less sandy subsoil of red or yellow clay. Ninety-eight per cent. of the granite lands are in the

main good and easily tilled, yielding about 800 pounds of seed cotton to the acre, when fresh and unmanured. Almost everywhere in these lands the timber is pine, either long or short-leaf, oak, chestnut, hickory and some black-jack. One feature of these soils worthy of note is their superiority over other metamorphic soils in both potash and lime, derived doubtless from the feldspar of the granite. In the mountainous Blue Ridge region, especially in Towns and Rabun counties, but little of this land is tillable except along the watercourses. In ten counties of the northeast section only a little over 12 per cent. of the area is under cultivation owing chiefly to the fact that that part of Georgia is as yet but thinly settled. The tillable lands have a very rich, dark red soil. Little Tennessee valley, in Rabun, is noted for fertility. Nacoochee valley, in White county, is famous as one of the most beautiful and productive in the State. Wheat and other small grains, corn, the choicest of fruits and vegetables, flourish luxuriantly. The rich grasses are of the very best for stock, and the beef, lambs, kids and veal, are as fat and nice as one could desire. Honey, butter, eggs, and chickens are abundant and can be had at reasonable prices. The forests are filled with the best timber. There are also to be seen beautiful flower gardens, summer houses and fountains, artificial lakes, parks for deer and pools for fishes.

The valley lands of the Tugaloo, Middle, Hudson and Soque rivers are productive of the best wheat and corn. Around Cornelia, in Habersham county, the most luscious peaches and other fruits are grown.

As we go southward from the Blue Ridge counties, there is a steady increase in the acreage under cultivation, until we get to the pine hills of the central cotton region, where from 60 to 75 per cent. of the entire area is under cultivation. Of the lands north of the Chattahoochee, those to the northeast have almost entirely gray, sandy soils, with but few strips of red clay. German millet and buckwheat flourish in this section, and good tobacco can be successfully grown, as is proven by the patches raised here and there exclusively for home use. This section is well adapted to such fruits as the apple, cherry, pear, grape, all varieties of plums, the peach, and to the gooseberry, raspberry, strawberry, blackberry and dewberry.

The Middle Georgia region was the first settled after the coast country and is the most populous section of the State. All the largest cities of the State, except Savannah, are in this belt. All through this section, whose lands are for the most part, of the red clay soil, cotton, corn, oats, wheat, and the other small grains, peas and all the grasses do well. Tobacco also can be successfully grown. Though injudicious culture for a

long time injured the soil, fields that had been abandoned and left to grow up in weeds have, after years of rest, under judicious cultivation, regained their fertility, and are once more among the best lands of Georgia. To give some idea of what may be done under wise management of the soil, we cite just a few examples.

On one farm in Hancock county, the first year after the sod of Bermuda grass was broken, there were gathered 1,800 pounds of seed cotton to the acre, and the second year 2,800 pounds to the acre. In each case this was without fertilizing. A third crop, corn manured with cottonseed in the usual manner and quantity, yielded sixty-five bushels to the acre. The fourth year the crop on this ground was wheat, and without fertilizing it yielded forty-two bushels to the acre. In Spalding county wheat has often yielded forty bushels and sometimes sixty to sixty-five bushels to the acre, and as much as 10,726 pounds of hay have been gathered on one acre in one season. In Bibb county 8,646 pounds of crab grass hay have been harvested on one acre in a season.

To show what "worn-out" land can be made to do, we give the example of Mr. Samuel Bailey. In 1868 he purchased a place in Oglethorpe county which every one considered almost worthless for farming purposes. The first year he cultivated only sixteen acres, ploughing deep and subsoiling, and leveling all washes as near as possible. He sowed one acre in wheat and fifteen in cotton. From his acre of wheat he gathered fifty-seven bushels, and from his fifteen acres in cotton he obtained eleven bales weighing 465 pounds each. He always advocated deep culture and thorough preparation of the lands before planting, more especially when manuring highly, either with barn-yard or commercial manure. He gave special attention to the drainage of land, stopping all washes. He used the manures manufactured at the Oglethorpe Fertilizing Works. He expressed the conviction, however, that barn-yard and cotton seed manures were more lasting. By saving all manures accumulated on his place, he brought his lands up to such a state of cultivation, that in an ordinary crop year without the aid of manuring, they would produce on an average from thirty-five to forty bushels of wheat, and one bale of cotton to the acre. He also grew all kinds of vegetables for family use, and sold annually Irish potatoes, onions and watermelons. He met with the best results in all kinds of fruits, such as peaches, pears, apples and strawberries. From one-eighth of an acre he has gathered twenty-eight bushels of strawberries of a superb variety (the Wilson Albany).

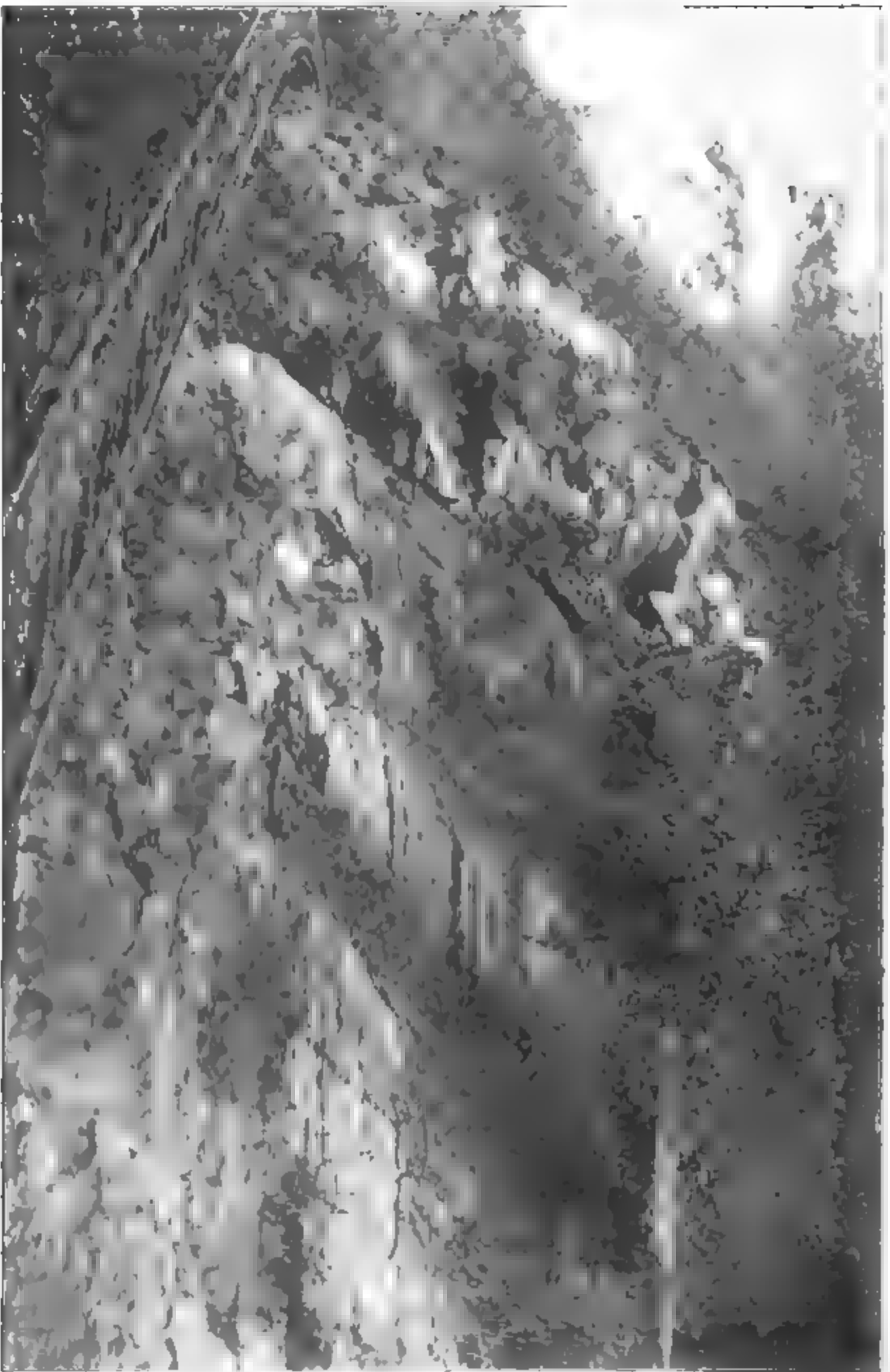
Another instance: In 1872 W. J. Born, in Gwinnett county, bought twenty acres of land that had been abandoned for years. This land had

gone to waste, and the twenty-acre plot was filled with gullies from five to ten feet deep, and some of them from five to ten feet wide. There appeared to be no soil, and all the humus was practically gone. Immediately upon the purchase of this plot of ground Mr. Born filled these gullies and waste places with pine brush cut from a neighboring field, hauled and scattered many loads of pine needles and oak leaves, using a two-horse plow, plowed and re-plowed this land, and leveled as best he could. Then he strewed broadcast the twenty-acre field with stable and barnyard manure, re-plowed, harrowed and rolled again. He then sowed it down in oats, and used two tons of commercial fertilizers, turned these oats under, harrowed and rolled again. The following spring these oats were mowed while in the "dough" state for hay, getting a fairly good crop of oat hay. He again fertilized heavily with barnyard manure and some commercial fertilizers, and sowed peas immediately after taking off the oat hay. In the fall the peavines were turned under and again oats were sown, using a liberal quantity of manure. This process was continued until the fourth year, when he planted this twenty-acre plot in cotton, and made twenty bales. This land was purchased for five dollars an acre. At the end of the fifth year it had been brought to a high state of cultivation, and instead of being worth five dollars could have been easily sold for twenty-five dollars per acre. This land had a red clay foundation. What Mr. Born did in 1872 has been done by others, and should be done by many more.

Throughout this whole section peaches, pears, apples, plums, cherries and other fruits, with all kinds of berries, abound. Its melons are without a superior. Among them the Augusta melon, so-called from its chief shipping point, takes high rank. All along the lines of railway from the northeast section down through Middle and Southern Georgia are extensive tracts devoted to grape culture.

SOILS OF SOUTHERN GEORGIA.

The central cotton region of the State includes the southern part of Middle Georgia, and large areas of Southern Georgia. It embraces three distinct belts having well marked differences. The first of these is the *sand and pine hills belt*. Its northern limit is a line running from northeast to southwest as follows: from a few miles north of Augusta and Thomson ranging a few miles south of Warrenton and Sparta to Milledgeville, Macon, Knoxville, Geneva and Columbus. At this point the metamorphic rocks are found outcropping in the beds of the streams, while the sand hills extend northward a short distance along the uplands.



MARBLE BLUFF, GLIMMER COUNTY.

The southern limit of the sand and pine hills belt is clearly marked by the somewhat abrupt appearance of the red clay hills along its border. The width of this belt varies greatly, being rather narrow in the part of it lying between the Ogeechee and Flint rivers, and greatest within twenty-five or thirty miles of the Savannah on the east, and the Chattahoochee on the west. Its southern limit on the Chattahoochee is near the mouth of Upatoi creek. In Taylor and Marion counties it widens to twenty miles or more. The area embraced in the sand hills is 2,950 square miles, the surface of the country being high and rolling, especially along the northern limit, where the altitude is from 500 to 600 feet above the sea, and from 100 to 150 feet above the adjacent metamorphic region. In some localities, as between the Flint and Ocmulgee rivers, the lower part of the belt is a broad plateau gradually declining southward. In the western portion the transition to the red hills is gradual.

As might be inferred from its name, the soil of this belt is sandy, and the prevailing timber pines, both long and short-leaf. There is also some scrub black-jack, oak, sweet-gums and dogwood, with an undergrowth along the streams of bay and gallberry bushes.

The second belt is the *red hills*. This belt is characterized by a high rolling, or broken and well-timbered surface. The lands are of red clay, associated generally with silicious shell rocks, and are found in isolated areas over the entire yellow loam region. At Shell Bluff, on the Savannah river, the beds are sixty feet thick, and at Fort Gaines, on the Chattahoochee, fifty feet. Between these two points their thickness diminishes to ten or twenty feet near the divide of the Central Atlantic and Gulf waters. The soil is somewhat sandy, from twelve to twenty-four inches deep in the eastern counties and six to twelve inches in others, with a subsoil of heavy clay loam, stiff and hard to break up, of deeper color than the soil, overlying at times a variegated and elastic pipe-clay. Between the Savannah and Flint rivers are the best lands of this belt, more productive and durable, and easily tilled, and in large areas. They yield from 800 to 1,000 pounds of seed cotton when fresh, and under proper culture continue to do so. The timbers are oak, hickory, short-leaf pine and dogwood, with beech, maple and poplar on the lowlands. Small grain is one of the best crops for these lands.

The third belt is the *Yellow Loam Region*, or the *oak*, hickory and long-leaf pine hills, with soils sandy and gray, but dark on the immediate surface from decayed vegetation, with a subsoil of yellow clay-loam or yellow sand, at a depth of from three to nine inches from the surface. This belt extends across the State from east to west. In width it

varies, in some parts reaching from the sand hills south to the pine and wire-grass region, and in others from the red hills southward to the same limit. In Houston county these lands are found north of the red hills.

The entire area embraced by the yellow loam region and red hills is 6,650 square miles. The names given to this belt indicate the character of its growth and soil. The lands are well drained and easy to cultivate, and yield an average of 500 pounds of seed cotton to the acre.

The Southern Oak, Hickory and Pine Region comprises portions of the counties of Decatur, Thomas and Brooks, lying along and near the Florida line. This region is for the most part rolling, about seventy-five feet above the wire-grass country on the north of it or 130 feet above the Flint river. From a point seven miles south of Bainbridge the ascent, eastward to Attapulgus and northward by Climax, is quite abrupt. But farther to the east it gradually merges into the wire-grass. The area of this section is about 2,317 square miles. The surface of the country is generally open with a growth of tall, long-leaf pine, where the soil is sandy with generally a clayey subsoil, underlaid by white limestone; but in some localities, where there is a red clay loam, the timber is oak and hickory.

One feature of this region is the rare appearance of wire-grass, and the almost total absence of silicious shell rocks, except in some lowlands.

The yield under ordinary cultivation is reported at from 600 to 800 pounds of seed cotton to the acre.

The lowlands of the Central Belt comprise the bottoms and hammocks of the streams and gallberry flats. On the Chattahoochee river there is but little bottom land, because the uplands approach to the water's edge as bluffs. The soil is a dark loam, more or less sandy, red on some of the streams, and from one foot to six feet deep, down to a tenacious pipe-clay. On some of the other large streams the bottom lands proper, which vary in width from 200 to 1,500 yards, when cultivated, are devoted to corn and oats, for the reason that cotton crops on these lands are liable to injury from early frosts and wet.

The hummocks, or second bottoms, of the larger streams above overflow are well cultivated, and on some of the streams they are extensive, being very level, with a growth of pine and most of the hardwoods common to Georgia. The soil is a rich sandy loam, with a depth of from twelve to twenty-four inches, having in it much decayed vegetation, and is very productive. These hummock soils yield about 1,400 pounds of seed cotton to the acre when fresh, and from 800 to 1,000 pounds after a few year's cultivation; but under skillful management their original fertility can be pretty well maintained. The alluvial lands of the Sa-

vannah river have a growth of beech, white and water oaks, holly, bay, birch, mulberry, sycamore, cottonwood, hickory, ash and walnut. These lands have a soil which is a brown loam, mixed with mica scales and of a depth of from two to three feet. They are well adapted to cotton, corn and grain. Being very productive, they are largely under cultivation and yield 1,500 pounds of cottonseed on fresh land, and under the ordinary modes 5,000 pounds after a few years' cultivation.

Along the Chattahoochee from Columbus to Georgetown are level valleys of open prairies similar to the second bottom of other streams, but higher and without their growth. In Muscogee county these valleys are broad and open, with a fine sandy loam soil from five to twelve inches deep, and a heavy clay subsoil. Farther south where the blue clay marls approach the surface, the valleys are richer, and yield 800 to 1,200 pounds of seed cotton to the acre.

The long-leaf pine and wire-grass region covers a large part of Southern Georgia south of the oak and hickory and pine lands of the central cotton belt. The entire region is a vast plain very nearly level, except on the north, covered with long-leaf pine, and including in its area eighteen whole counties and large parts of others. The surface of the upper and western portions is somewhat rolling, being elevated from twenty-five to seventy-five feet above the streams, and from 200 to 500 feet above the sea. The northeastern and southwestern portions of this region, being underlaid with limestones, have a better class of soil, as may be known from the intermixture of oak and hickory with the long-leaf pine.

This region can be subdivided into two: the lime sink, and the pine woods region.

The lime sink region embraces 7,020 square miles, and includes the following counties and parts of counties: Screven, except a strip along the eastern and northern side of the county; the southern part of Burke; the northern part of Bulloch; all of Mitchell, Miller, Colquitt and Worth; the southern parts of Pulaski, Baker and Early, and the southern and eastern parts of Dougherty, the northern parts of Decatur, Thomas, Brooks and Lowndes; the eastern parts of Dooly and Lee; and the western parts of Irwin, Berrien, Dodge and Wilcox. The uplands of this region have a gray, sandy soil, from six to twelve inches deep, with a subsoil of red or yellow sandy clays, and yields about 500 or 800 pounds of seed cotton. The bottom or alluvial lands of the rivers and hummocks of the creeks have a dark loamy soil with a clay subsoil, at a depth of from ten to twenty inches. Being very durable they yield from 800 to 1,000 pounds of seed cotton to the acre, even

after many years of cultivation. Along the uplands oak is the principal timber, and on the bottom lands, white and red oaks, ash, hickory, poplar, beech, bays and magnolia.

The pine woods, or sandy wire-grass region covers an area of over 10,000 square miles, including the following counties and parts of counties: Tattnall, Montgomery, Emanuel, Telfair, Appling, Coffee, the middle of Effingham, the southern portions of Bulloch, Johnson and Laurens, the eastern parts of Wilcox, Irwin, Berrien and Lowndes, the upper portion of Pierce, Wayne, McIntosh, Liberty and Bryan, and portions of Jefferson, Washington, Dodge, Ware and Clinch. The surface is generally level, but sometimes slightly undulating, underlaid in some places by sandstone which, along the streams, juts out into bold bluffs. The soil is usually fine and sandy, with a subsoil of yellow sand, frequently underlaid with clay. This piney wire-grass region terminates near the coast, forming a terrace, from which there is a descent for fifteen or twenty-five feet to the Savannah and pine flat and palmetto lands. The soil of the uplands is sandy and gray, or ash-colored, twelve inches deep, with a subsoil of yellow or orange-colored loam, to which sometimes an underlying clay gives durability and vigor. These lands, when fresh, yield without fertilizers about 500 pounds of seed cotton to the acre, and sometimes more, and a judicious use of fertilizers keeps up this degree of productiveness. Corn, oats and sorghum-cane do well. On the low hills, where ferruginous concretions, commonly known as "Georgia pills," occur, other crops thrive better than cotton, which in those special localities is liable to rust. In bottom lands the soil is richer and colored almost black by decayed leaves and other vegetation, and the growth is poplar, cypress, and titi, with some pine and "fever tree" or "Georgia bark." The vast pine forests that cover this *pine woods region* are a source of great wealth to the State, and the trade in lumber has built up thriving towns. Wherever the timber lands are cleared, the land is being occupied and put under cultivation. The marls that abound in many parts of this section, when mixed with the muck from the swamps, afford a cheap fertilizer, which increases greatly the productiveness of the soil. This region opens a fine opportunity to the enterprise of truck-farming. Those desiring to engage in such business had better come while lands can be purchased at low rates.

The pine and palmetto flats lie in the southeastern corner of the State, around Okefinokee Swamp, and embrace mainly the counties of Charlton, Echols and Clinch, and large parts of Ware, Pierce and Wayne. This belt is considerably higher than that of the coast region, extending across other counties to the Savannah river.



LEWISTON WHITE CLAY BED, JONES COUNTY.



The country is level and open with many swamps, having a dense growth of titi, tupelo and black-gums, sweet and loblolly bays and cas-sino, a short-leaf pine, all interlocked with bamboo briers, forming a dense thicket. The chief timber growth is the long-leaf pine and cypress, and on the open lands a dense mass of low saw-palmetto, gallberry bushes and some wire-grass. This region is about 125 feet above the sea, the descent on the east being very rapid from Okefinokee Swamp to Traders' Hill, at the head of tide-water and Saint Mary's river. From thence is a level second terrace to the edge of the savanna covered with deep white sand.

The creek bottom and hummock lands, though not very wide, have a dark loam soil from eight to twelve inches deep with a clayey subsoil, beneath which lies a blue clay stratum. The growth of these hummock lands is in the main oaks, black-gum, tupelo-gum, cypress, maple, etc.

The coast region, covering in all about 2,045 square miles, includes savannas, live oak lands and islands. The "savannas," a belt of country from ten to fifteen miles wide, between the pine woods and wire-grass region on the one side, and the "live oak lands" on the other, extend from the Savannah to the Saint Mary's river, embracing nearly all the counties of Chatham, Bryan, Glynn and Camden, and large portions of Liberty and McIntosh. The surface of the country, known as the first terrace, is very level, standing from ten to fifteen feet above tide-water, and at some points higher. Its northwestern limit is the bluff of the second or wire-grass terrace, passing through the lower part of Effingham (twenty miles north of Savannah), into Bryan, where it is fifty feet high. At Savannah the bluff is forty feet above low-water mark. Southward through Liberty county, at "Gravel Hill," south of Hinesville, its elevation is from fifteen to twenty feet above the sea, and in Camden county fifteen miles east of Colerain, it is about twenty-five feet. Along the first or lower terrace of this region are meadow or savanna lands, broad, flat and open, with a sparse growth of tall long-leaf pines, and a thick undergrowth of saw-palmetto with here and there bunches of wire-grass which have found their way down from the upper or second terrace. In spring and early summer all over these broad extended plains beautiful flowers present to the delighted eye of the beholder a charming view.

The live oak and coast lands spread along the coast and occupy the numerous islands stretching from the Savannah to the Saint Mary's river, with an irregular and interrupted belt of yellow or mulatto sandy soil, characterized by magnificent live oaks, festooned with streamers of

gray moss often ten to fifteen feet long. There is also a growth of red and water oaks; hickory, chincapin, pine, red cedar, sweet-gum, cabbage palmetto, a tall variety of blue palmetto and sassafras. There are really three divisions of this live oak belt, viz.: upland or ridge, middle, and lower bottom lands, the last of which have a very rich dark soil, underlaid by a blue clay, well adapted to the celebrated black-seed or sea-island cotton. Not so much attention as formerly, however, is paid now to this long-staple cotton, since the use of fertilizers makes the upland or short-staple a more remunerative crop.

The coast tide swamp lands occupy a narrow belt, not continuous along the Atlantic coast, but bordering on the various inlets and streams to the limits of tide-water. Along the Savannah these lands are cultivated upward of twenty miles from the brackish marsh up the river. On the Altamaha their extent from the marshes upward does not exceed sixteen miles, because freshets prevent them from being of value except for timber. The soil along the Altamaha having more of decayed vegetable mold than that of the Savannah is more easily cultivated. The tide lands of the Ogeechee extend from the marshes about ten miles. Those of the Satilla, though not as broad as the others, extend from the marshes twenty miles up the river and are not liable to freshets. The swamp lands of the Georgia side of the St. Mary's river extend only to the foot of the second terrace some fifteen miles east of Colerain, though tide-water reaches Trader's Hill. The lands of this belt are the rice lands of the State, being devoted almost exclusively to its cultivation. Georgia's yield of this wholesome article of food is second to that of South Carolina, which State ranks next to Louisiana. Other crops do well, but rice is so much in demand that planters give to it the preference.

Of marsh land there is only a small area along the Georgia coast, at the mouths of some of the rivers.

The Sea Islands, which, large and small, form along the coast a network, with a rolling surface not exceeding fifteen feet above the tide, have a united area of 560 square miles. The soil is usually sandy, well adapted to the production of sea-island cotton, corn and sweet potatoes. In their delightful climate, sufficiently warm, and yet cooled by ocean breezes, lemons, figs, pomegranates, olives and oranges grow finely.

Finally in every part of Georgia are lands capable of the highest cultivation, with soils adapted to the very best results. If the settler desires to raise the various grains or grasses, the fleecy cotton, or the fruits found in every zone of production in the United States, from the hardy apple of the north to the tender orange of the tropics, he can choose his section of Georgia, buy his land and go to work with as much certainty of suc-

cess as in any other of the most favored parts of the Union. Fine Irish potatoes can be raised in Georgia, and no better sweet potatoes are anywhere produced. Again we would call attention to the fact that in addition to the various crops that have been mentioned in this description of soils, Middle and Southern Georgia are the home of the sugar-cane, richer in saccharine matter than any other plant from which sugar is extracted. No more charming farm scene meets the eye than a vast field of tasseled cane with all its promise of good things to come and future profits.

The ground-pea, which, when parched, is held in such high esteem, is produced extensively in Georgia. The chufa, though not so well known, is valued as good food for hogs.

Nor should we fail to name among other good products of Georgia soil the chestnuts, walnuts, hickory-nuts, chincapins and pecans, which help to give good cheer to the family circle as they gather on a winter eve before the hearth heaped up with blazing logs, or grate with glowing coal.

The mulberry tree should come in for a share of notice. This tree grows in every part of the State, especially in the sandy soil of some parts of Middle and Southern Georgia. The fruit of the black mulberry makes a very fattening food for hogs. The leaves of the white mulberry are the favorite food of the silkworm. When the colony of Georgia was founded it was intended that the production of raw silk should be one of its industries. Would it not pay some one who understands this business to embark in it in Georgia?

An excellent article of tea has been grown in Southeast Georgia.

Indigo grows wild in its southern section, and was at one time cultivated, until cotton absorbed almost all the attention of our people.

Peas and beans grow in every section of the State and the value of the cow or field-pea to all the cotton belt of Georgia, both for forage and soil fertilization, cannot be overestimated. The peas furnish excellent food for stock, and are good food for man as well, superior to the Boston bean. The hay made from the vines is of fine quality and very nourishing.

The reports that have been made on authority of the United States census concerning Georgia's soils give but a feeble conception of their productiveness. The authors of those reports in making up their averages for crops raised in the different belts, gave the results of the work of the unskilled laborers under overseers who were themselves ignorant of the best modes of cultivation. But skillful farmers using the best methods give us a fair idea of the capacity of Georgia soil in every section of the State. We give here some well authenticated yields:

In Cotton.—In Washington county, partly in Middle and partly in Southern Georgia, 6,917 pounds of seed cotton to the acre; in Troup county, Middle Georgia, 4,594 pounds; in Burke county, in the northern part of Southern Georgia, 4,500 pounds; in Carroll county, Middle Georgia, 4,500 pounds; in Crawford county, southeastern part, in Middle Georgia, 4,500 pounds; in Clay county, Southwestern Georgia, and Brooks, bordering on the Florida line, 2,700 pounds; in Coweta and DeKalb counties, in Middle Georgia, but both above the center of the State (DeKalb considerably so), 2,200 pounds.

In Corn.—In Spalding county, Middle Georgia, 137 bushels to the acre; in Cobb county, in the northwestern part of Middle Georgia, 125 bushels; in Wilkes county, Middle Georgia, 123 bushels; in Thomas county, Southwestern Georgia, bordering on the Florida line, 119 bushels; in Crawford county, partly in Middle partly in Southwestern Georgia, 115 bushels; in Cherokee county, in Middle Georgia belt, but northwestern part of the State, 104 bushels to the acre.

In Oats.—In Wilkes county, Middle Georgia, 137 bushels to the acre; in DeKalb county, Middle Georgia, 131 bushels; in Floyd county, Northwest Georgia, 121 bushels; in Coweta county, western Middle Georgia, 115 bushels; in Schley county, Southwestern Georgia, 100 bushels; in Brooks county, Southern Georgia, on the border of Florida, 75 bushels to the acre.

In Wheat.—In DeKalb and Spalding counties, Middle Georgia, 65 bushels to the acre; in Carroll county, Middle Georgia, 40 bushels; in Cherokee, Middle Georgia belt, but northwestern part of the State, in Milton next on the south, and Walton, Middle Georgia, 28 bushels to the acre.

In Sweet Potatoes.—800 bushels to the acre in Richmond, Crawford and Berrien counties, the first named being on the border of Middle and Southern Georgia and bordering on South Carolina, Crawford in Southwestern and Berrien in Southern Georgia, with but one county between it and the Florida line; 500 bushels in Brooks county, on the Florida border; 400 bushels in Fulton county, Middle Georgia belt but northwestern part of the State.

In Irish Potatoes.—Four hundred and twenty bushels to the acre in Wilkes county, Middle Georgia; 109 bushels in Walker county, extreme Northwestern Georgia.

In Upland Rice.—One hundred bushels to the acre in Hall and White counties, in Northeast Georgia; Pike, in Middle Georgia; and Early in lower Southwest Georgia on the Alabama line.

In Cane Syrup.—Seven hundred gallons to the acre in Bulloch



SAVANNAH VALLEY ROAD, RICHMOND COUNTY.

county, Southern Georgia; 695 gallons in Thomas county, in Southwest Georgia, on the Florida border; 600 gallons in Brooks county, Southern Georgia, on the Florida border; and 480 gallons in Burke county, in the northern part of Southern Georgia.

In Clover Hay.—Sixteen thousand pounds to the acre in DeKalb county, Middle Georgia; 10,000 pounds in Greene county, Middle Georgia; 6,575 pounds in Cobb county, northwestern part of Middle Georgia belt.

In Peavine Hay.—Ten thousand seven hundred and twenty pounds to the acre in Spalding county, Middle Georgia.

In Bermuda Grass Hay.—Thirteen thousand nine hundred and fifty-three pounds to the acre in Greene county, Middle Georgia.

In Lucerne.—Nine thousand four hundred pounds to the acre in Gordon county, Northwest Georgia.

In Crabb Grass Hay.—Eight thousand and forty-six pounds to the acre in Bibb county, on the border of Middle and Southern Georgia.

In Corn Forage.—Twenty-seven thousand one hundred and thirty pounds to the acre in Greene county, Middle Georgia.

In Sugar.—Twenty-one barrels to the acre in Bulloch county, northern part of Southern Georgia.

CHAPTER V.

PUBLIC ROADS IN GEORGIA.

RAILROADS AND WATER TRANSPORTATION.

In every county there should be good roads, on which the farmer can haul to the nearest market, or shipping point, the produce of his farm with the greatest degree of comfort to himself and the least possible wear on his wagons and stock. Roads must keep pace with all other improvements; for the public highways will have an important bearing on the judgment formed in regard to the thrift and enterprise of any county. Much interest in this subject has been aroused in Georgia for several years.

In 1891 a law was enacted authorizing commissioners of roads and revenues of each county, upon recommendation of the grand jury, to fix and levy a special road tax, not to exceed two mills on the dollar, and also to exact of each male inhabitant a commutation tax not to exceed fifty cents a day for the number of days' work required. The law also authorized authorities to organize chain-gangs of convicts, or to hire free labor for improvement and maintenance of public highways. The expenses were to be met by special road and commutation taxes. Many of the counties have adopted the new road law and every year adds to their number. The plan, on which the work is done, is to divide the force employed into squads, each of which consists of from fifteen to forty-five men under a competent superintendent and one or more overseers. Each squad is supplied with camping outfit, two or more road machines, wheeled scrapers, wagons, plows, and from ten to twenty mules. Usually on leading roads the working force first goes over them with machine giving proper crown, opening side ditches, macadamizing boggy places, and cutting down the grades of the steeper hills. In the case of less-important roads the force employed works them from one to two years. On the second working more attention is paid to grading and macadamizing. In counties having large cities, where from 100 to 400 convicts are employed, the roads are graded and macadamized at the first working. Under this system several hundred miles of first-class macadamized roads

have been built in several counties within the last three years. Among the best are the Manchester and Peachtree roads near Atlanta, thoroughfares equal to the best ideal. In this great work Fulton county leads all others, spending in 1900, \$140,000, and constructing many miles of well-graded macadamized road. Other roads of similar merit are found in Bibb, Floyd, Bartow, Richmond, Jefferson, Emanuel, Spalding, Meriwether and Chatham counties. The shell road from Savannah to Bonaventure and Thunderbolt was noted even before the civil war. The shell roads of Glynn county radiating from the city of Brunswick are also worthy of mention. From the city of Rome in Floyd county some of the finest macadamized roads in Georgia lead out in all directions. These roads of Floyd county cover more than seventy-six miles, and are built of hard limestone and marble. They are being added to at the rate of one mile a month. All of these roads are of easy grade and thoroughly drained. The county authorities expect to continue this system of road-building. In Bartow county there radiate from Cartersville in all directions splendid roads over which it is a delight to drive. The same is true of those of Richmond county, which center in Augusta, or those of Bibb, that form the favorite drives of the citizens of Macon. Thomas county has long enjoyed a good reputation for its well-graded drives through the fragrant pines. Ere many years at the present rate of progress all the citizens of Georgia will be blessed with good country roads, on which travel and transportation will be pleasant at all seasons.

One of the most efficient means of arousing interest on this subject of good roads in Georgia, is the meeting of the county road commissioners held in Atlanta.

RAILROADS OF GEORGIA.

Georgia was from the first introduction of railroads into America, one of the most active in their construction. In fact, her preeminence among her Southern sisters in railroad building, combined with the leading part played by her in the promotion of various manufacturing enterprises, gave her the proud title "Empire State of the South." In the number and extent of her railroads she still ranks foremost. Among and through her mountains and hills, valleys, plains and forests, highlands and lowlands, north, south, east and west, they thread their way, pouring wealth into the laps of Georgia's cities and towns, and giving convenient and rapid transportation to the farmers, merchants and manufacturers of the State. The condition of the roads is excellent. The great trunk lines are laid with heavy steel rails and well ballasted. With

these main lines shorter ones connect many towns and stations, which otherwise would be remote from the great arteries of trade and travel. Several great systems of railroads are operated in Georgia.

The Central of Georgia enjoys the distinction of being the first built in the State (1833). It extended originally from Savannah to Macon. By taking in other lines and building branch roads, it has spread out in every direction, traversing with its 1,301.54 miles of rail fifty-one counties of Georgia, giving to them access to the ocean through the port of Savannah.

The lines of this company penetrate and cover, in a most complete manner, Middle and Southwest Georgia, the great fruit and trucking sections of the State. Its lines also cross the Chattahoochee river at Columbus, Georgetown and Columbia, and, passing through the mineral, agricultural, timber and naval stores section of Alabama, gather the rich products of that great State and bear the bulk of them to the markets of the world through Savannah, the greatest South Atlantic seaport, where direct steamship connections are made for all points in the East and Europe.

The lines of this great system reach nearly every important town in the State, among which are Atlanta, Savannah, Macon, Augusta, Columbus, Athens, Americus, Albany and Griffin. A great many other progressive towns of Georgia are reached by this system. Twenty-one of these cities and towns have electric light pulants and are otherwise equipped with all modern conveniences.

Among the most important industries located within the territory covered by the Central in Georgia are: fifty-six cotton mills, operating 698,070 spindles and 25,739 looms, representing an aggregate capital of \$10,650,800; one woolen mill; twelve knitting mills; sixteen flour mills; twenty-five cottonseed-oil mills; twenty guano factories; sixty-three brick kilns and clay potteries; twenty-six iron foundries; twenty-seven machine shops; twenty-two canneries; sixteen wagon and buggy factories; five spoke and handle factories; eleven tanneries; twenty-eight ice manufacturing plants; three granite quarries; 131 dairies and 5 creameries.

In addition to the above there were handled from points on the lines of this company during the past year (1900), 126,891 barrels of rosin and 33,158 barrels of spirits of turpentine.

No compendium of facts bearing on the resources of Georgia, or of that territory in the State covered by the Central of Georgia Railway would be complete without reference to the great agricultural and horticultural interests of this section. Of agriculture should be mentioned the more staple crops, cotton, corn, sugar-cane, wheat, rye, oats, potatoes,



WASHINGTON PIKE ROAD, RICHMOND COUNTY.

field-peas and broom corn. Under this head we would also mention the making of hay from native and foreign grasses, to which more attention is being paid than ever before.

In horticulture should be mentioned the market gardens, or truck farms, raising cucumbers, beans of all varieties, tomatoes, cabbages, onions, etc. Under this head comes the fruit industry, which has reached vast proportions. More interest than ever before is being taken in growing peaches, pears, plums, apples, grapes of many varieties, watermelons, cantaloupes, cherries, strawberries, blackberries, etc.

In addition to the above mentioned crops, special attention should be called to the growing of tobacco, which has hitherto been a small crop in Georgia. From successful experiments in planting tobacco during the past year in lower Middle Georgia it is confidently predicted that the section of the State lying south of Macon is destined to become in time, one of the greatest tobacco-growing sections of the Union. With the distribution of tobacco seed and the assistance of an expert tobacco grower, all of which is being furnished free to the farmers by the Central of Georgia Railroad, every reasonable effort is being made to interest the farmers in this crop.

The manufacture of syrup from sugar-cane has in the past year or two reached such a stage of perfection, as to render the growing of sugar-cane very profitable. Analyses recently made by thoroughly reliable and expert chemists show that sugar-cane grown on the hill-sides of lower Middle Georgia, or in the light sandy soil on the Atlantic coast, contains from two to four per cent. more saccharine than can be grown in the alluvial lands. The farmers in this territory are appreciating the importance of paying more attention to growing sugar-cane and to the handling of its products.

The timber and lumber industries in this State have reached vast proportions. In addition to the enormous trade in Georgia pine and all hard woods in our domestic markets, there are millions of feet of this class of timber and lumber exported annually through the South Atlantic and Gulf ports.

The terminus of the Central of Georgia Railway, with its magnificent wharf and terminal properties, is at Savannah, the great South Atlantic seaport. In the sketch of Chatham county is given a complete statement in detail of the business handled through this port during the past year. A large percentage of this was handled by the lines of the Central system.

The Southern Railway operates in the State of Georgia nearly 1,016 miles of travel. Beginning at Atlanta lines radiate to the south, west,

north, and northeast, and place the cities and towns of the State along its lines in close touch with the Atlantic Ocean, the coal fields to the west and the great cities and markets of the North. Its lines pass through the important cities of Atlanta, Augusta, Athens, Columbus, Griffin, Macon and Rome, and connect them with Savannah, the greatest South Atlantic port, and with Brunswick, the second in importance of Georgia's ports.

Fifty-one counties are traversed by this system, and, taken as a whole throughout the State, every variety of resource, soil, climate and industry in Georgia is found somewhere contiguous to its lines.

The textile industry is well represented. On January 1, 1900, there were in the towns tributary to the Southern in Georgia, forty-four cotton mills, operating 628,896 spindles and 16,960 looms, and representing a capital stock of over \$10,000,000. There were also six knitting mills and six woolen mills, and there are now under construction, or completed since that date, twenty other textile concerns.

The timber wealth of this country is enormous, and at the present time there are tributary to the Southern seventy-five saw and planing mills with a daily capacity of about 780,000 feet of pine, oak, poplar and other lumber. There are nineteen cottonseed-oil mills with several more under construction or in contemplation. There are also more than forty grist and flour mills, besides new ones now contemplated, to handle the large wheat crop. In fourteen towns there are electric light plants; in five, large brick making establishments, while many more have clay deposits suitable for development; more than forty foundries, machine works, or other iron industries; five canneries, and as many more projected or being built; eight furniture plants and a large number of factories making spokes, handles, wagons, crates, coffins, vehicles, etc. Several towns have ice factories, and at a large number quite a business is done in shipping naval stores to Brunswick and Savannah for export. There are four companies making leather products, two creameries, several fertilizer factories and a large number of gineries. The most active mineral district is Dahlonega, tributary to the Southern at Gainesville, where a large stamp mill and chlorination plant has been erected, extensive mining done and a large amount of money expended in developing the gold deposits of that section. At Gainesville a million dollar cotton-mill is being erected; another small one organized and a smelter projected.

The Southern traverses the great mineral section of the State as well as some of the best lands for all the staple crops, fruits, melons, berries and vegetables, and some of the finest timber lands in the world. The Southern and Central systems give to a large section of the State two

splendid competing lines, and each stretches out its great arms into sections not traversed by the other. Both these roads are doing all they can to advertise and build up the sections through which they pass, and their efforts are meeting with great success.

The Plant System operates in Georgia 616 miles, and traverses nineteen counties, possessing every grade of soil from light sandy and alluvial to the heaviest clay and river bottom, and having a climate temperate and especially adapted to agriculture and horticulture. On its line are three cotton-mills with 18,000 spindles; three cottonseed-oil mills, four fertilizer factories, two barrel factories, ninety-six turpentine stills, twenty-five camps where railroad ties are manufactured and sold. Eight of the towns on the system have electric plants, viz.: Savannah, Brunswick, Quitman, Waycross, Albany, Valdosta, Thomasville and Bainbridge. There are two brick plants at Albany, one at Bainbridge and one each at Johnson's and Williams's stations, five in all; also one pottery plant at Stockton. There are foundry and machine works at Savannah, Brunswick, Waycross, Albany, Valdosta and Tifton, and canneries at Tifton and Albany. There are also bucket factories at Whigham and McRae's. Along the lines of this system the output of naval stores amounts to 260,000 barrels of rosin and 90,000 barrels of spirits of turpentine. There are ice plants at the eight large towns. Almost every mile of the territory traversed by the Plant System is suitable for agricultural and horticultural pursuits, dairying and grape growing. Dairy farming is profitably conducted near most of the large towns.

The Georgia Railroad was the second chartered in the State (Dec. 31, 1833). Its main line connects Augusta and Atlanta, and including its branches operates 314 miles and traverses eighteen counties, having on its line the two important terminal cities already named besides Athens, Macon, Greensboro, Madison, Covington, Oxford, Milledgeville, and other smaller but flourishing towns. The country traversed is a part of the great cotton belt of Georgia. Many of the foundries and mills already spoken of as being on the line of the Central and Southern systems are also on the line of the Georgia Railroad at Atlanta, Augusta, Athens and Macon. There are brick plants at several points, and potteries at Milledgeville, Macon and Grovetown. At each of the terminal points of the main trunk of the Georgia Railroad are extensive planing-mills and furniture factories. No road in the State has more extensive local traffic, in both freight and passengers.

The Georgia Southern and Florida Railway Company operates 169 miles of track in Georgia, beginning at Macon and ending at the Florida State line, connecting Vienna, Cordele, Tifton, Valdosta and many

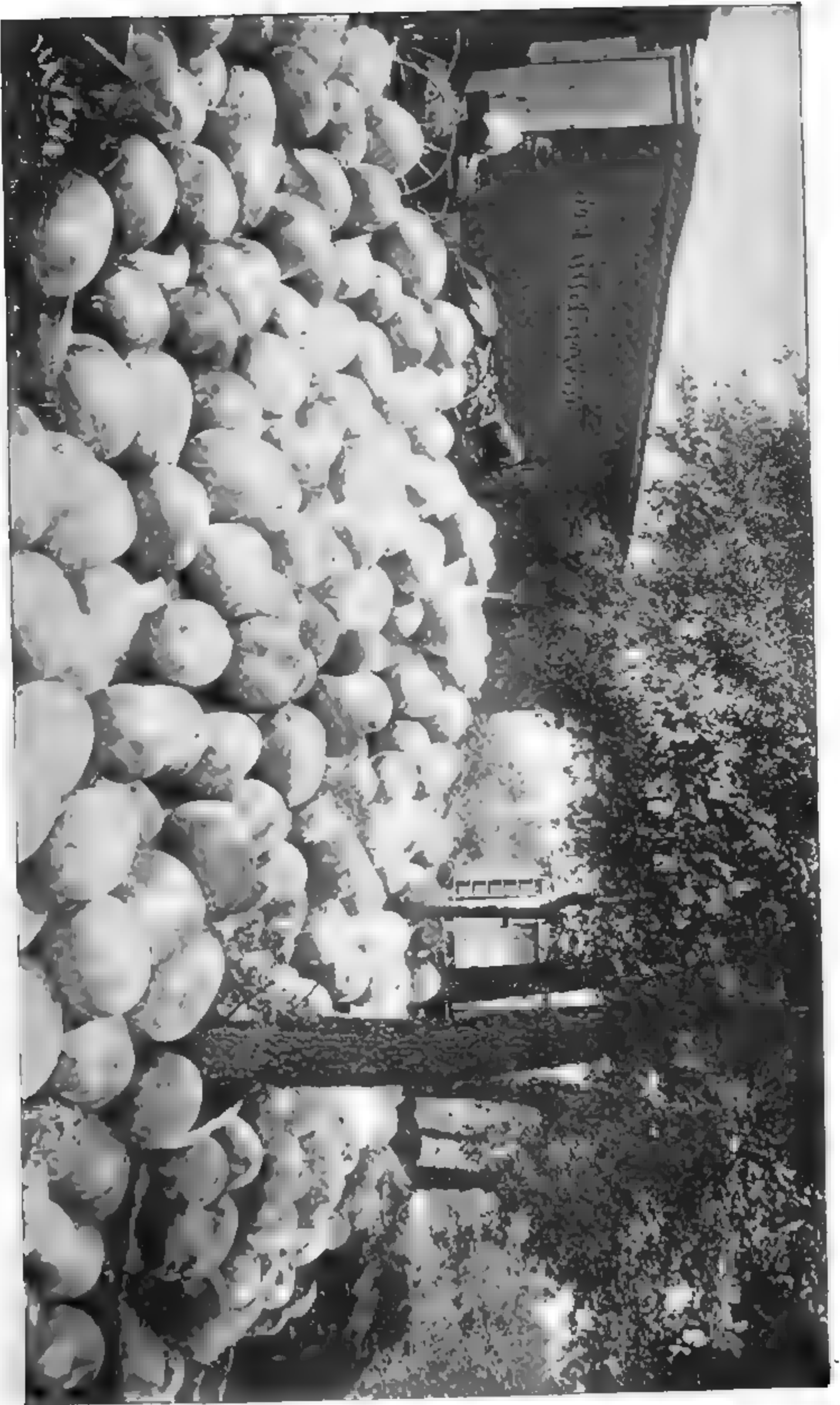
smaller towns with Macon, its chief terminal. The principal trade opened up by this line is that of lumber and naval stores. There are on its line within the State of Georgia forty-seven sawmills with a daily capacity of 1,073,000 feet of lumber; twenty-one planing-mills with a daily capacity of 454,000 feet; eighteen shingle-mills with a daily capacity of 425,000 shingles; six lath mills, turning out daily 94,000 laths; five stave mills capable of a daily production of 77,000 staves; twenty-five turpentine stills turning out 85,000 barrels of rosin and 25,000 barrels of turpentine annually. Beginning at Macon this line runs along a ridge between the Ocmulgee and Flint rivers, the waters of the former flowing into the Atlantic Ocean, and of the latter into the Gulf of Mexico. This territory is for the most part what is known as the "wire-grass" section, and is one of the best in the State for grain, cotton and stock. The farms are generally small and cultivated by the owners, who, raising their own provisions and making cotton a surplus crop, are generally out of debt and prosperous. Long-staple or "sea-island" cotton is chiefly raised in the Southern counties, there being marketed at Valdosta alone one-tenth of this entire crop in the United States. This is also a great section for fruit, which is less liable than in other sections to frosts in the spring, as was shown in 1894 and 1899, when a considerable quantity was shipped off this line, while in other parts of the State peaches were a total failure. There are on this line outside of Macon two cotton factories aggregating 14,000 spindles and 450 looms, with a capital of \$235,000, three cottonseed-oil mills, three guano factories, two ice factories, three iron foundries, four machine works, three canneries, one spoke and handle factory, one broom factory, four barrel factories, one wagon and one buggy factory, and two harness factories. There are on the line in Georgia five brick yards, four being in Macon and one near Lenox in Berrien county. There is not much dairying along this line, but those engaged in the business are prosperous.

Considerable upland rice is produced for home consumption, and in some years considerable is shipped. The yield is 30 bushels to the acre.

Both cigar and smoking tobacco have been grown along this road, the former producing from 1,000 to 1,200 pounds to the acre, and the latter averaging 750 pounds to the acre. A good local market would cause a renewal of the growth of this plant.

This region is especially adapted to the growth of sugar-cane, which is true also of the sections traversed by the Central, Southern and Plant systems. Many families from the northwestern and other States are settled along the Georgia, Southern and Florida.

The Western and Atlantic division of the Nashville, Chattanooga



SHIPPING MELONS AT DIETZEN'S.



Railway system operates in Georgia 139 miles, of which eighteen are known as the Rome Railway. This road connects Atlanta with Marietta, Acworth, Cartersville, Rome, Calhoun, Dalton and Ringgold in Georgia, and Chattanooga in Tennessee, passing through seven counties, embracing a splendid agricultural section, whose crops of cotton, grain and hay are excelled nowhere in the State. Fruit trees, especially peach, have been planted in great numbers and with wonderful success. From Cartersville to the Chattahoochee river grape culture is successfully carried on, and from Ringgold and vicinity strawberries are grown and shipped in abundance. The section about Ringgold is best adapted to small fruits and grain; about Dalton to vegetables, fruits and grain; about Calhoun to corn, small grain and peaches; about Adairsville to wheat and peaches; about Cartersville to fine staple cotton, corn and wheat; around Marietta to cotton, peaches and grapes; around Smyrna to small fruits, peaches, grapes and cotton. Considerable sorghum is made for domestic use. Tobacco is grown in small quantities for home use only. A fine timber country is tributary to the line on the headwaters of the Coosawatee and Conesauga rivers, which streams unite above Resaca to form the Oostanaula. All manufacturing interests seem to be in a thriving condition. The increase in mining has probably been 100 per cent., in other lines about 20 per cent. Outside of Atlanta, are the following cotton mills: two at Dalton with a total of 25,000 spindles and 620 looms; one at Rome with 5,200 spindles and 108 looms. There are nine flour mills; cottonseed-oil mills at Rome and Acworth; knitting mills at Marietta and Atlanta; paper mill at Marietta, and mills for production of guano filler (graphitic slate) at Emerson. There is a carriage factory at Cartersville, a crate factory in Adairsville, furniture factories at Rome, Dalton, Acworth, Marietta and Atlanta. There are tanneries in Atlanta, Acworth and Cassville, and ice plants in Atlanta, Marietta, Cartersville and Rome. There are iron ore beds near Emerson, Cartersville, Roger's Station, Clifford, Adairsville, Tunnel Hill, Ringgold and Allatoona, near which latter place is a gold stamping mill. There is manganese in abundance near Cartersville; granite at Vining's Station and on Kennesaw Mountain, but no quarries; black and variegated marble near Calhoun and Dalton, but not being quarried; large marble mills in Marietta, using marble from along the line of the Atlanta, Knoxville and Northern Railroad, on which connecting line are a number of quarries in operation, the greater portion of whose output is handled by the Western and Atlantic. Limestone quarries are in operation at Graysville and Clifford, the output being eight car-loads a day. At Cement are cement works whose output is 200 barrels a day. The Southern

Company plaster works at Emerson, making filler for fertilizers, have an output of 10,000 tons per annum.

The Atlanta, Knoxville and Northern, operating 105 miles in Georgia, runs from Marietta to the Tennessee line, through six counties, passing through the town of Canton, Tate, Jasper and Ellijay. Through the Western and Atlantic Railroad it connects with Atlanta. Along this line are some large orchards and the finest marble quarries of Georgia.

The Macon and Birmingham Railway operates nearly ninety-seven miles of its own track and uses about eight miles of the track of the Central between Macon and LaGrange, having on its line also the towns of Culloden, Yatesville, Thomaston and Woodbury. It traverses six counties of an excellent agricultural district, the principal product of which is cotton. There is one cotton mill of 6,600 spindles at Thomaston; two at LaGrange aggregating 27,500 spindles, and a third one of 10,000 spindles in process of erection. There are electric light plants at Thomaston and LaGrange, a cottonseed-oil and guano factory at LaGrange, and a shoe factory at Thomaston. There is a factory for the manufacture of sash, doors, blinds and crates at Woodbury, and a coffin factory at Mutual, operated by the Mutual Aid Society (colored). The output of naval stores is 5,000 barrels of rosin and 100 barrels of spirits of turpentine. There is a tannery at Thomaston and a creamery at LaGrange. There are excellent granite deposits for thirty or forty miles of the distance, principally in Upson and Meriwether counties. There is a granite quarry at Odessadale. Along the line the agricultural products are cotton, corn, sugar-cane, sorghum, wheat, oats, rye and potatoes. The land is well adapted to grapes, peaches and other fruits, the flavor of which is especially good, owing to the large amount of potash in the soil.

The Seaboard Air Line operates nearly 134 miles of railroad between Atlanta and the South Carolina State line, traversing eight counties, and passing through the towns of Lawrenceville, Athens and Elberton. The country traversed is a fine agricultural section and has great manufacturing interests at Atlanta, Athens and Elberton.

The Georgia and Alabama road, running almost a bee line from the Alabama line eastward to Savannah with its many branch roads, 376 miles in all, and traversing sixteen counties, is now a part of the Seaboard Air Line system. It transports the products of a large section of Georgia and Alabama to swell the exports of Savannah. Some of its territory is also traversed by roads of the Central of Georgia and Southern systems. The leading cities and towns on this road and its branches are Columbus, Lumpkin, Preston, Americus, Dawson, Albany, Fitz-

gerald, Abbeville, Mount Vernon and Savannah. All along its line are important manufactories, whose products help to swell its freights. A great many people from northern and western States are settling along the three great lines of the Seaboard Air Line. This is true also of the Central and Southern.

The Florida Central and Peninsular Railroad, which, with its hundred and thirty-eight miles, traverses eight counties of Georgia from the Florida line to Savannah, thence northward to the South Carolina line in Effingham county, has also been consolidated with the Seaboard Air Line system. Along its line are large sawmills and turpentine distilleries. Its main shipments are naval stores gathered at the stations along its route through the great pine belt of Georgia. It passes near St. Mary's, but not through any important town in Georgia except the city of Savannah, which it connects with Fernandina, Jacksonville, Lake City, Live Oak, Madison, Tallahassee, St. Marks and other points in Florida. The total number of miles embraced in this great combination, now known as the Seaboard Air Line system, is 648, passing through thirty-two counties of Georgia.

The Atlanta and West Point Railroad, named for its two terminal points, passes through five counties of a productive portion of Georgia. The soils along this line are red clay, sandy, with clay subsoil and hummock lands. Abundant crops of the staple productions of Georgia are handled by this road. It forms a connecting link between the great trunk line systems from the East and the Louisville and Nashville Railroad, and thus participates in the carrying of the trade from the eastern markets to the Pacific coast, and likewise shares the freight moving in the reverse direction. The industries along its line are varied, consisting of agriculture, dairying, fruit-growing, cotton factories, foundries, canning establishments and tanneries. There is one flour mill at Newnan, one knitting mill at Grantville; of cotton-oil mills, one each at Newnan, LaGrange, Hogansville and West Point; of brick plants, one each at Moreland, West Point, Speers and Hogansville. Iron foundries and machine shops are located at Newnan, Moreland and West Point; there are two canning establishments, one at Newnan and one ice plant at Newnan. Three towns, Newnan, LeGrange and West Point, have electric plants. There is a gold mine in operation near Grantville. There are along this line seven cotton mills with 144,000 spindles, representing a capital of \$3,032,000.

The lands are adapted to general farming, fruit and vegetables. Large quantities of grapes and peaches are raised near Moreland, Coweta and Newnan.

The above are the principal railroad systems of Georgia. There are many short lines which play an important part in giving an outlet to the products of many sections, which without them could not reach the trunk lines except by the tedious and more expensive method of transportation offered by the mule team upon the country road. The following table, prepared for the last annual report of the Railroad Commission of Georgia, gives the railroad mileage of the State together with the names of the respective lines:

RAILROAD MILEAGE IN THE STATE OF GEORGIA FOR 1901.

Alabama Great Southern	24.32
Albany & Northern	35.00
Atlanta & West Point	86.11
Atlanta Belt Line	5.50
Atlanta, Knoxville & Northern	105.30
Atlantic, Valdosta & Western	70.13
Augusta Belt	3.80
Augusta & Summerville	2.00
Augusta Terminal	1.44
Central of Georgia	1,301.54
Charleston & Western Carolina	20.47
Chattanooga Southern	42.65
City & Suburban	22.00
Collins & Reidsville	6.91
Darien & Western	29.00
Dooly Southern	8.00
East & West	45.70
Flovilla & Indian Springs	3.00
Foy Railroad	10.00
Gainesville, Jefferson & Southern	65.00
Georgia	314.50
Georgia Northern	51.00
Georgia Pine	39.52
Georgia Southern & Florida	169.00
Hartwell	10.10
Hawkinsville & Florida Southern	33.00
Lawrenceville	10.00
Lexington Terminal	4.00
Louisville & Wadley	10.00



PICKING COTTON.



Macon & Birmingham	96.80
Macon, Dublin & Savannah	53.54
Midville, Swainsboro & Red Bluff	17.75
Millen & Southwestern	33.78
Nashville & Sparks	11.50
Nashville, Chattanooga & St. Louis	2.73
Offerman & Western	35.00
Plant System	616.39
Sandersville	4.00
Savannah & Statesboro	34.00
Seaboard Air Line	647.83
Smithonia & Dunlap	7.00
Smithonia, Danielsville & Carnesville	6.00
South Georgia	28.00
Southern Railway	998.15
Sparks, Moultrie & Gulf	40.00
Stillmore Air Line	34.05
Sylvania	15.00
Talbotton	7.00
Tallulah Falls	20.90
Tifton & Northeastern	25.00
Tifton, Thomasville & Gulf	55.50
Valdosta Southern	14.50
Wadley & Mt. Vernon	30.00
Waycross Air Line	45.00
Western & Atlantic (including Rome Railroad)	139.34
Western of Alabama .....	.17
Wrightsville & Tennille	76.00
<hr/>	
Total	5,623.92

WATER TRANSPORTATION.

Before the invention of railroads interior towns remote from navigable streams had small chance of becoming centers of trade. The construction of railroads has altered this, and has built up great cities remote from any water highway. And yet a navigable stream gives to a city the great advantage of a competing line, which reduces freight charges to a considerable extent. The Savannah river is navigable to the city of Augusta, whose importance as an interior cotton mart is greatly enhanced thereby. A line of steamboats plies between that city and

Savannah. The Chattahoochee is navigable from the city of Columbus to the Apalachicola and through that river to the Gulf of Mexico. The river trade of Columbus through its several steamboat lines is considerable. The city of Rome enjoys a fine river trade through two navigable streams, the Coosa and Oostanaula. Steamboats bring to that city the productions of the Coosa valley, lumber, iron, grain and cotton, and the staple products of the Oostanaula valley, among them large quantities of walnut, poplar and oak lumber. The Flint, which unites with the Chattahoochee to form the Apalachicola, flows past the flourishing little city of Albany, which enjoys the advantage of an extensive steamboat traffic. Darien has always had a considerable river trade along the Altamaha and its tributaries, the Ocmulgee and Oconee, boats running as far as Hawkinsville on the first named tributary and Dublin on the latter. The Savannah is the most important of Georgia's navigable streams, because over eighteen miles of its course heavily laden ships bear to the ocean the rich and varied articles of export that find their outlet through the prosperous city of Savannah. The St. Mary's will some day play an important part in the development of the southeast section of the State. On its right bank is situated the beautiful little town of St. Mary's, which already, through its fine harbor, accessible to the largest vessels, has a considerable trade in lumber, a large amount of which is brought to this port by the boats that ascend the river for some miles. The Satilla and Ogeechee are other navigable strams of Georgia, whose advantages have not been utilized to any considerable extent. Other navigable waters of Georgia are the inlets and sounds which flow between the mainland and the charming islands that skirt the coast from the Savannah to the St. Mary's. Through St. Simon's sound the largest vessels pass up the Turtle river to Brunswick, the second in importance of the seaports of Georgia, a city with a bright future before it, like Savannah, the center of a fine fruit and truck farming section, and having excellent shipping facilities.

CHAPTER VI.

AGRICULTURE.

Having discussed the economic minerals, water-powers, soils, and means of travel and transportation of our State, both by land and water, it is well to take up here the subject of agriculture, the special care of the department under whose auspices this work is given to the public, and to which already abundant reference has been made. What has been done in this important field of enterprise in Georgia is a matter of history. What shall be done in the future will depend upon the skill, as well as the industry, of our farmers.

Cotton.—Cotton, when made a surplus crop, and cultivated with such limitations as a sound business judgment would dictate, is still the great money crop of Georgia. Although our State has for several years past ranked most of the time as the second in cotton production, its average yield to the acre is not so great as one might suppose, who has seen the wonderful results secured on some farms by the employment of the best scientific methods. The reason for this is, that the loose methods which prevailed in the ante-bellum days, when, after exhausting the land, the planter sought new fields, are still employed on many farms. These are rented out for fixed money value or for share of products to unskilled negro laborers, who, without the guiding hand of an intelligent white farmer, cannot be expected to produce the best results. What Georgia soil can be made to do under the best scientific farming was shown in a previous chapter (page 155.) The more numerous the class of skilled farmers, the better show will Georgia make in her average yield by the acre.

From the first Georgia has stood high in production among the cotton States of the Union. For many years it was outranked only by South Carolina, which State was the first to engage in this industry. After passing South Carolina, Georgia was second only to Mississippi. In 1849 it fell behind Alabama; but in 1880 again took rank just behind Mississippi. Since 1895 it has, with the exception of one year, gone ahead of everything except the combined yields of Texas and Indian Territory. In this connection the following table will be found interesting:

COTTON CROP BY STATES—BALES.

	1900-01	1899-1900	1898-1899	1897-1898	1896-1897	1895-1896
Alabama	1,000,000	1,008,313	1,159,000	1,159,000	1,019,000	830,000
Arkansas	762,000	669,385	834,000	922,000	700,000	620,000
Florida	45,000	41,855	70,000	70,000	60,000	48,000
Georgia	1,295,000	1,845,699	1,536,000	1,536,000	1,300,000	1,079,000
Louisiana	719,000	699,476	590,000	740,000	575,000	430,000
Mississippi	950,000	1,208,789	1,522,000	1,627,000	1,228,000	860,000
North Carolina	542,000	508,825	588,000	583,000	500,000	384,000
South Carolina	911,000	830,714	1,012,000	1,008,000	800,000	684,000
Tennessee	350,000	355,000	414,000	485,000	330,000	252,000
Texas (and Indian Territory to 1899)	3,809,000	2,438,555	3,555,000	3,075,000	2,248,000	1,990,000

For the season of 1899-1900 Texas is estimated by itself.

The total cotton acreage of Georgia for the crop of 1899-1900 was 3,287,741.

Of Georgia's cotton production for the season of 1899-1900 the up-land crop was 1,284,811 bales, averaging 490 pounds to the bale, at 7.11 cents a pound, and thus bringing \$44,761,530. The sea-island crop was 60,888 bales, averaging 397 pounds to the bale, at 13.5 cents a pound, making this crop worth \$3,263,292. The entire crop of Georgia was 1,345,699 and was worth \$48,024,822. The average to the acre for the whole State was about 600 pounds of seed cotton.*

*The total Sea-island crop of 1899-1900 is shown in the following table taken from the report of the U. S. Department of Agriculture:

Sea-Island Cotton Crop for 1899-1900

State	Receipts at—				Total Crop
	Savannah.	Charleston	Brunswick	Jacksonville	
Georgia	<i>Bales.</i> 49,939	<i>Bales.</i>	<i>Bales.</i> 10,949	<i>Bales.</i>	<i>Bales.</i> 60,888
Florida	22,278	.....	.....	7,329	29,607
South Carolina	88	7,810	.....	.....	7,898
Total	72,250	7,810	10,949	7,329	98,338

The Department's special agent at Charleston, S. C., Mr. Lewis F. Sloan, submits the following statistics and observations relating to this crop:

Exports and Coastwise Shipments

Ports	Exports in Bales to—			
	Great Britain.	Continent.	American Mills.	Total.
From Charleston	4,991	1,368	1,316	7,675
From Savannah	33,181	6,639	30,806	70,626
From Brunswick .....	.....	.....	10,949	10,949
From Jacksonville .....	.....	.....	7,329	7,329
Total	38,172	8,007	50,400	96,579

Stock on hand at Charleston, S. C., September 1, 1900.....bags... 886
 Stock on hand at Savannah, Ga., September 1, 1900.....do... 1,688

Total stocksdo... 2,078



A CORN FIELD.

The following States, including Oklahoma Territory, not in the above list also raised some cotton: Virginia, 8,007 bales; Missouri, 17,275; Oklahoma, 66,555; Kansas, 188; Kentucky, 24; Utah, 26.

A cotton crop does not necessarily deplete the soil more than other crops. But the fields, being left bare, are washed and leached by winter rains, and some of the best elements of the soil are withdrawn. A systematic rotation of crops would save this waste and preserve the fertility of the land. A judicious use of fertilizers will enormously increase the productiveness of the fields and correspondingly enlarge the profits of the planter. The composting of commercial fertilizers with animal manures, marl, muck and cottonseed will greatly reduce the cost of fertilization. All the manurial resources of the farm should be saved under shelter that they may be ready for application to the fields at the proper time. For every pound of lint produced there are two of seed, which are useful as a fertilizer. Peavine hay, properly turned under, has already been frequently mentioned as a cheap and valuable fertilizer. No longer is the sale of the lint the only source of profit derived from the cotton crop. The various uses made of the seed, for food for stock, for oil and a fertilizer, swell the profits of the skillful and provident farmer. The steady increase throughout Georgia of mills, either for the manufacture of cloths and thread from the lint, or of oil, cotton-meal cakes and hulls from the seed, has already affected the price of cotton to the great advantage of the producer. Let every farmer raise his own supplies, and plant the rest of his land in cotton. Then competence and wealth will reward his skill and diligence.

Some idea of the increased wealth to the farmers of Georgia, derived from the by-product of the cotton, may be gathered from the following statement: In 1890 the cottonseed of Georgia amounted to 596,000 tons, the average value of which by the ton, was \$10.21, which would give \$6,085,160. During the season of 1898-99 the number of tons of cottonseed was 778,000. Toward the close of the season this sold as high as \$14.00 a ton. At that rate the value of the total product amounted to \$10,892,000. Of course it was not all sold, some of it being used as a fertilizer, and some as feed for stock. Yet the possibilities, as shown by these figures, enable one to form some idea of the value to the farmer of his cottonseed, which in ante-bellum days were considered of no account. There is no doubt that cotton properly managed is the greatest wealth-producing crop in the United States.

Any skilled farmer of the West and North, who, in the great grain States, makes a success of farming, will find his opportunities for acquir-

ing wealth in his chosen occupation greatly enlarged by settling in Georgia and adding to his assets the rich revenue, that comes from an intelligent cultivation of the fleecy king.

EGYPTIAN COTTON.

The experimnets in the Southern States on Egyptian Cotton have been very limited. The United States Department has several times in the last decade sent out a few of these Egyptian seed for experiments, but, although the results have not been very satisfactory, the Department is convinced that the Egyptian cotton can be grown in favorable localities in the South, especially in parts of South Carolina and Georgia. It has been suggested that the Egyptian cotton should supply the mills from our Southern cotton fields, and the idea is a good one.

The Jannovitch Egyptian cotton was grown in South Carolina under the direction of the Division of Vegetable Physiology and Pathology. In common with other Egyptian varieties it shows a marked resistance to root disease. It has many good qualities, chief among which are the length and quality of the staple and fiber of the plants. It has disappointed the planters, however, by its small bolls, making the cotton hard to pick, besides the yield is not so large as that of upland cotton. It is easier to pick than the Sea-Island cotton, and makes about as much to the acre. This Egyptian cotton is inclined to run to weed on rich, moist soils, whereas it does not grow large enough in the poor soils in the hilly counties. Hence, the Egyptian cotton grows best in those parts of Georgia, Florida, Alabama, and South Carolina, where the Sea-Island cotton is more or less established, not only because these soils will probably prove to be best adapted to the Egyptian cotton, but because the planters are accustomed to the planting and handling of long-staple cotton, and have the roller gins necessary. "The importation of cotton from Egypt steadily increased," say the Department at Washington, "from less than two hundred thousand pounds in 1884 to more than forty-three million pounds in 1896." The price of Egyptian cotton ranges from four to six cents higher than the price of ordinary American upland cotton. The annual import of cotton from Egypt for the last three years has averaged in value nearly four millions of dollars. The Egyptian cotton has a very fine, silky fiber, generally shorter than that of Sea-Island, but longer than that of upland varieties. It is used in the manufacture of fine yarns for the finer qualities of hosiery and knit goods. A number of mills buy this Egyptian cotton to mix with wool, since it is much

harder to detect in wool than our American upland cotton. As has been said before, some attempts have been made to grow Egyptian cotton in this country. In 1894 the Department imported and distributed a stock of Egyptian seeds, and, while experiments with these have shown favorable results, there is still need of further trial to determine the exact conditions, under which this cotton can be grown to best advantage. The Agricultural Department at Washington is of the opinion that with proper management the Egyptian cotton industry may become well established in the United States.

In 1897 the United States imported of Egyptian cotton nearly six thousand bales; in 1899 it had increased to more than sixty thousand bales. One great cause of this importation is, that the Egyptians handle their cotton with so much more care than the South does. Our country now supplies about eighty per cent. of the cotton consumed by the mills of Europe and America.

Egyptian cotton has a long, strong, silky staple from $1\frac{1}{8}$ to $1\frac{1}{2}$ inches in length, while the staple of what is called our upland cotton ranges from $\frac{3}{4}$ to 1 inch, and of our Sea-Island cotton from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches. It is especially adapted for sewing thread, fine underwear, and hosiery, such as balbriggan, and for other goods requiring a smooth finish or a high lustre. It gives a fabric a soft, silky-like finish, and this character, together with its lustre, makes it desirable for mixing with silk in the manufacture of various kinds of silk goods. Hence this Egyptian cotton does not compete with either our short-staple or long-staple. It fills a gap between the two.

Another reason for the increase of the Egyptian cotton importation is, that many descriptions of goods are now made in this country which were formerly made in Europe.

Now we come to the question, can Georgia and the South raise these 60,000 bales of Egyptian cotton which our mills annually use? The State Department of Agriculture is clearly of the opinion that this can be done. Wherever long-staple cotton can be grown successfully the Egyptian cotton can be grown. While we would not advise one to plant his entire crop with the Egyptian variety, still we think it worthy of a fair trial.

Corn.—Next to cotton in rank as a staple crop of Georgia comes corn. The yield of this important cereal, wherever the best methods are employed, is very large. As is the case with cotton, so also, in respect to corn, the number of farms in every county tilled by unskilled methods brings down Georgia's average yield to the acre. This is between eleven

and twelve bushels, although it has been seen that some of our most progressive farmers have produced as much as 125 bushels to the acre. Of the cotton States, however, only two, Tennessee and Texas outrank Georgia in the area devoted to corn. Counting in the great grain States of the northwest, which produce no cotton, Georgia, in 1890, came in as the eleventh State in the number of acres devoted to corn, viz.: 2,592,316, which yielded 29,261,422 bushels.

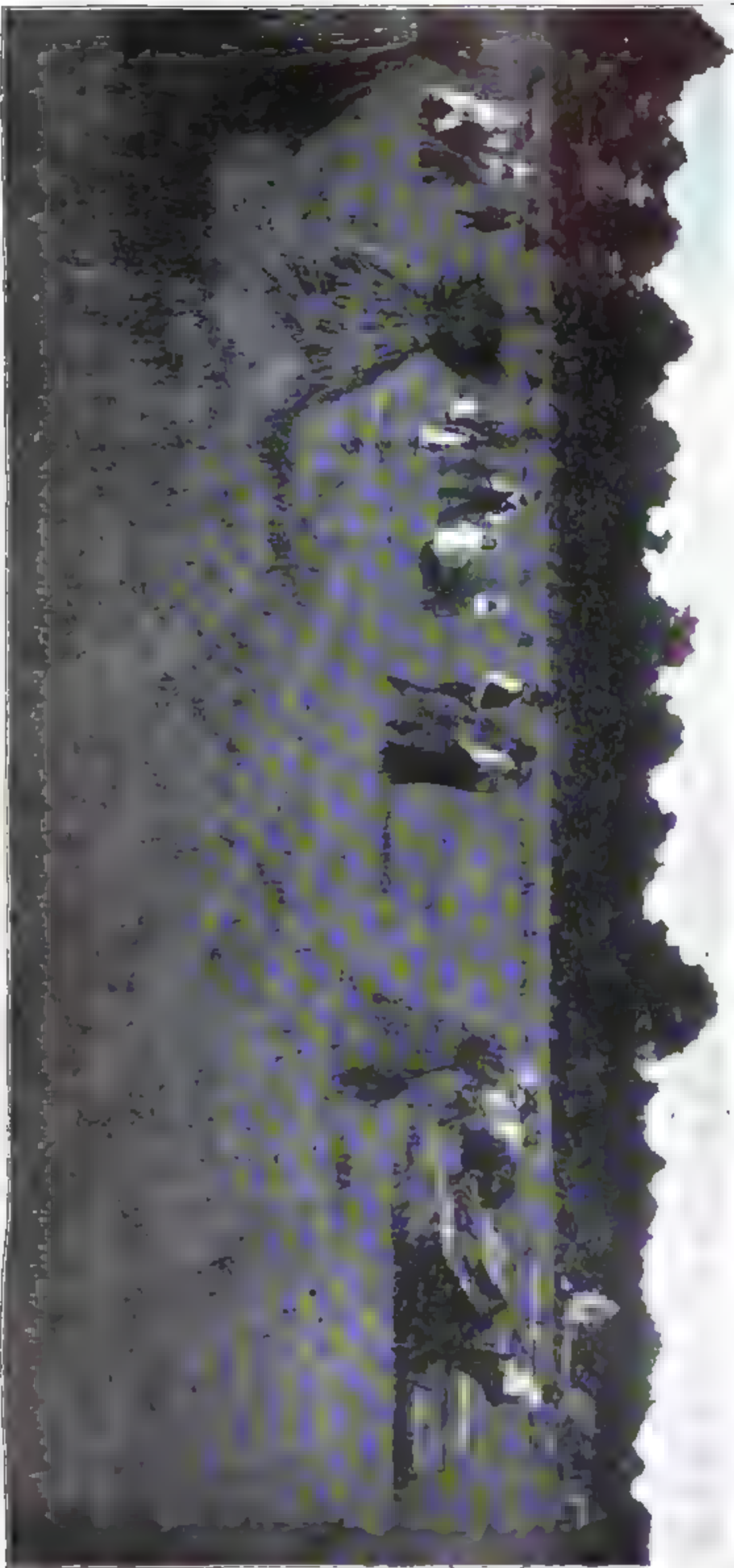
By the census of 1900 Georgia's corn area was 3,411,953 acres and her production, 34,119,530 bushels, valued at \$19,448,132. On March 1, 1901 the stock on hand was 17,400,960 bushels, or 51 per cent. of the crop. The number of bushels shipped out of the counties in which they were grown was 2,047,172.

In the years of the civil war Georgia's production of corn was very great, and the southwestern part of the State was the granary of the Confederacy.

Corn is one of the most important products of the field, and every farmer should seek to increase the capacity of his land to give him an abundant yield. From the matured grain comes the meal, which constitutes the chief source of the bread supply of thousands of people, while the bran separated from the meal by bolting, forms an excellent feed for stock. For this latter purpose the unground grain is also used, the ration of corn upon the cobb being part of the daily stock food in every well-filled stall. The truck farms, or market gardens, which furnish vegetables to neighboring or distant cities and towns, send to the market thousands of juicy roasting ears, a favorite article of food in every American community.

But when we have considered the acreage and production of corn, we have by no means exhausted the subject. The leaves, or fodder, and the shucks that are stripped from the ears constitute, when properly cured, a forage highly prized on every farm. Sometimes while in a green state, the stalk, fodder and shucks are cut up together, and being deposited in a silo, constitute the corn ensilage, so useful as a food for the milch-cow and other stock.

The old-time custom of pulling fodder is not so much in vogue now as formerly. At the proper time, before the grain is fully ripe, the stalks, with their leaves and corn still on them, are cut and shocked like wheat or other grain. Then, when the ears have been taken out of the shucks, the shucks are shredded by means of a machine made for that purpose, and the material then baled is ready for the market. Sometimes a field of corn is purposely planted so closely as not to produce ears, and



HARVESTING WHEAT.

the whole mass, at the proper stage of advancement, being cut down, affords most excellent forage.

Further mention of the uses of corn as a forage crop will be made in the section on grasses and forage crops.

Wheat.—Although Georgia, being a leading cotton State, has never ranked in wheat production with the North Central grain States, yet her soil, when sowed in that important cereal, is capable of producing great results. Before the days of low freight rates from the great west, wheat cultivation was very remunerative in Georgia, and Georgia flouring mills declared large dividends. But the grand trunk lines, with their low rates of transportation, made it so difficult for Georgia millers to compete with the west, that many of the leading mills abandoned the contest. Then the farmers sowed but little more than enough for their own use, and Georgia's acreage and production rapidly declined. At the time of the census of 1890 her wheat area was 196,633 acres, with a production of 1,096,312 bushels, or a little more than five and one-half bushels to the acre. But the fact that they were raising cotton to such an extent as to cause an over-production and consequent low prices, aided by the constant and persistent efforts of the Department of Agriculture to induce the farmers to pay more attention to wheat, oats, and other small grains, brought about a wonderful revival of wheat culture. Articles urging the planting of more wheat which from time to time went forth from the department, were copied in many agricultural publications and reprinted in agricultural monthlies having extensive circulation among the farmers. The result was the selection of some of the best lands for wheat, and a great increase in the acreage from year to year. As the farmers increased their production, the Georgia mills once more became active. Old ones that had shut down started up again, and new ones were built in different parts of the State. The revival of the wheat industry has been especially noteworthy in the last two years. The fall of 1899 saw a larger percentage of land in wheat than ever before. Georgia, not satisfied with her record as one of the foremost cotton States, seems to be progressing to the point where she can take a proud stand among the wheat growing States of the South. Her wheat area in 1899 was 297,239 acres and her production, 2,021,225 bushels, showing an increase in area of 101,606 acres, and in production of 924,913 bushels. The value of the wheat crop of 1899 was \$1,980,800. The wheat crop of 1900 was 5,011,133 bushels, valued at \$4,760,576. This crop was grown on 550,674 acres, and 501,113 bushels were shipped out of the counties in which they were grown. The stock on hand March 1, 1901, was 1,302,895 bushels. The splendid increase in acreage and production

of wheat for 1900 is highly gratifying to those who are anxious to see Georgia take her proper stand as a wheat-growing State.

Some farmers sow wheat as a forage crop, preferring it to oats, rye or barley for that purpose. What may be done with wheat in Georgia is best seen, not from the general average, reduced by causes previously mentioned, but from what has been accomplished on some of the best managed farms. The following yields of wheat are well authenticated: from one farm in DeKalb county, sixty-five bushels to the acre; from one in Carroll, forty bushels; twenty-eight bushels an acre from farms located in Cherokee, Milton and Walton counties. Of these five counties Dekalb, Carroll and Walton are on the northern border of the Middle Georgia belt; Cherokee and Milton are higher north. In Oconee, a Middle Georgia county, forty-eight and one-half bushels of wheat were grown on one acre in 1900.

On the 11th of July, 1900, the third annual convention of the Wheat Growers Association of Georgia was held at the Academy of Music in Macon. Reports were made and prizes which had been offered by the *Telegraph*, the leading journal of Macon, were bestowed for the best yields of wheat. In each case the report was rendered by different committees, each consisting of three gentlemen, who measured the field reported and the wheat as it was threshed, and supported their report by sworn affidavits. The yields were as follows: from four acres in Spalding county belonging to W. J. Bridges, an average of sixty-five bushels to the acre; from four acres in Spalding county, belonging to W. D. Walker, an average of fifty-nine and one-half bushels to the acre; from four acres in Bibb county, belonging to Julian R. Lane, an average of forty-one and one-fourth bushels to the acre; from four acres in Washington county, owned by T. H. Cox, an average of twenty-eight bushels to the acre; from four acres in Jones county, owned by W. F. White, an average of twenty-four bushels to the acre; from four acres in Wilkenson county, owned by Z. T. Miller, an average of nineteen and three-fourths bushels to the acre; from one acre in Bibb county, owned by J. S. McGee, thirty-nine and three-sevenths bushels. The average of all these reports from five counties of Middle and Southern Georgia is something over thirty-nine and one-half bushels to the acre.

This is another proof of what Georgia can do, and another strong argument in behalf of wheat culture in this State.

Mr. Bridges, the successful competitor in the wheat contest, in an interview with a reporter of the *Macon Telegraph*, said: "It has been said by some that wheat should not be planted in the same place two consecutive years, or that it could not be made to yield satisfactorily if it was

done. This, I find, is a mistake, as a portion of my land this year had been planted in wheat for three consecutive years, and on sixteen acres I harvested 711 bushels, or an average of about forty-four and one-half bushels to the acre. This was done on upland too, as I do not approve of bottom land for wheat. . . . About four years ago I began to manure my land with the idea of bringing it up to where the benefit to it would be permanent, and by judicious use of stable manure and droppings from cattle, used with fertilizers, I brought it up to where it would make from one and a half to two bales of cotton to the acre. To do this I gave it a very heavy coating of manure in the spring, and saw that it was well broken up with a two-horse plow. This should be done in the spring always. As to the land that I planted in wheat this year, I gave it a very heavy coat of manure in the spring and then planted it in cotton. After I had gathered the crop, I ripped out the stalks and then turned the land over with a two-horse plow, following that with a cutaway harrow, then rolling it with a heavy roller. My wheat was then put in with a drill, using about four hundred pounds of a special high-grade potash fertilizer at the same time. In planting the wheat, I put in 105 pounds, or one bushel and three pecks to the acre. . . . The land upon which my crop was made is a gray, loamy top soil, with an undersoil of stiff red clay that retains the moisture to feed the roots. I consider that this is the best soil to be found for wheat, as it enables it to withstand a drouth better, or to go through a rainy season better, than a shallow gray soil or an all clay one. The variety of wheat that I sow is the purple, or, as it is sometimes called, the bluestem variety, which has proved the best that I have known used. It should be soaked in bluestone to prevent smut, which is more to be dreaded than rust. To do this successfully you should use about one pound of bluestone in enough water to wet the wheat thoroughly and go right on sowing it. The bluestone should be dissolved in boiling water. It takes only about a gallon of water to every two bushels of wheat. I have always followed this plan and have never had the smut to appear in my wheat. Wheat should never be sown until after the first big frost in November, for then it will withstand more successfully the ravages of the fly, or small grub, that begins at the root and saps the vigor from the young shoots, causing them to grow up spindling, stalks that are short, with faulty heads. The frost seems to have the effect of killing this fly if the wheat has not been planted before and has come up to where it makes a nest for the fly and its young. As for the other bane of the wheat growers, the cheat, I have never had any trouble with that, and am not prepared to suggest any method to get rid of it, though I think that if it were to make its ap-

pearance in my grain that I would take the pains to pull it out, each stalk separately, if necessary.

"After harvesting my wheat I then begin and plant the entire acreage in peas, which really amounts to the same thing as beginning to get your ground in condition for wheat again, as there is no known crop, not even clover, that under the same conditions will do your ground the permanent good that peas will. From my peas I usually get from two to three tons of pea hay per acre, and sometimes I expect the yield will reach four tons. This year I have planted about 100 acres in peas and am confident that with continued seasons a large portion of it will yield fully three tons per acre. It cannot be beat as a forage for both horses and cows, and is one of the easiest raised. The acreage that I raised my sixty-five bushels per acre on will again be planted in wheat this fall and has on it as fine a crop of peas as ever grew out of ground. I am more than delighted with my success with wheat this year."

Mr. Thomas H. Cox, whose four acres averaged twenty-eight bushels to the acre, in a letter to the Agricultural Department said: "The land on which my wheat grew was a light gray. I sowed two bushels of the bluestem variety per acre broadcast and plowed it as deep as I could with single plows. I used as a fertilizer about seventy-five bushels of cottonseed. I sowed this crop the middle of November, and gathered the 20th of May. I really believe that if I had prepared my land and had harrowed my grain in, I would have made more per acre by plowing in deep. My wheat never came up regular. I notice that some was coming up fully six weeks after the first had come up. My land was elevated but well terraced."

Mr. W. F. White, who made an average of twenty-four bushels to the acre, wrote to the department as follows: "I broke my land with a one-horse Haimon stock, using a common 4-inch turnplow on what is known as red land, clay subsoil; used twenty-five bushels of cottonseed per acre, sowed one bushel of wheat per acre 15th of November, reaped on the 18th of May. I sowed purple straw, known as bluestem, broadcast; plowed wheat in with 4-inch turner; ran over land with Thomas's smoothing harrow. I soaked the wheat twenty-four hours in a solution of one and one-half pounds of bluestone to five bushels of wheat, keeping it well covered under water for time mentioned; I then rolled it in slacked lime. You can then see where every grain falls."

Oats.—One of the most valuable of our crops is oats. To the raising of this important product our farmers are paying more attention than ever before. Under favorable conditions the yield is good and with comparatively little expense aids materially in making the farm self-sustain-



OAT FIELD.



ing; for, besides being one of the best forage crops, oats add greatly to the fertility of land on which they are raised.

In 1890 the area devoted to oats in Georgia was 516,886 acres, and the production was 4,767,821 bushels. There was a slight falling off in acreage and production in 1899. In 1900 the area devoted to oats was 467,336 acres and the production was 7,010,040 bushels, valued at \$3,434,920. The stock on hand March 1, 1900, was 1,121,606 bushels. There were 140,201 bushels shipped out of the counties in which they were raised.

Among well-authenticated extraordinary yields of oats in Georgia are the following: 137 bushels to the acre on a farm in Wilkes county and 131 bushels in DeKalb, both of these counties being in Middle Georgia; 121 bushels in Floyd county, Northwest Georgia; 115 bushels in Coweta county, Middle Georgia; 100 bushels in Schley county, Southwest Georgia; 75 bushels in Brooks county in the extreme south of the State. Thus we see there are lands well adapted to oats in every section of Georgia.

Rye.—This is one of our best green forage crops, but is not so extensively cultivated in Georgia as oats. In 1899 the area devoted to rye was 15,805 acres and the yield was 94,830 bushels, a falling off in acreage, but an increase in yield over the crop of 1890, when 20,949 acres produced 87,021 bushels. The area sown with rye in 1900 was 15,647 acres and the yield was 109,529 bushels valued at \$112,815.

Barley.—Barley is by some valued more than rye, and is generally sown about the same time; but in Georgia not much attention is given its cultivation, as may be seen by the fact that in 1890 the area given to barley according to the United States Census was only 549 acres with a yield of 6,053 bushels. In the Year Book of the United States Department of Agriculture for 1900 Georgia is not credited with any barley, though it is well known that several Georgia farmers did raise it. It would pay our farmers to give more attention to both rye and barley.

Rice.—In China and India, the original homes of the rice plant, many varieties are known. But in America the common distinctions are upland and lowland. Its introduction into South Carolina in 1700 is said to have been accidental. It was carried also to Louisiana, which State leads all others, with South Carolina second and Georgia third. In 1890 the acres devoted to rice culture in this State were 18,126 and the production was 14,556,432 pounds. There have been for several years past fluctuations in these figures. One hindrance to its production has been the lack of a sufficient number of mills for cleaning it. This is particularly true of upland rice, to the cultivation of which much attention is being given in Southwest and also in Northeast Georgia. Milling facili-

ties have been greatly improved of late, which will lead to a considerable growth of this industry. Improved modern machinery for use in its cultivation may be expected to impart fresh impetus to the growth of this important cereal. The planters of Louisiana have replaced the antique implements of the hand laborer by the gang plow, disk harrow, drill and broadcast seeder. In the cultivation of the lowland rice where water is needed, if there is not a sufficiency of water, this is secured by irrigation canals. In the cutting of rice, the twine binder of the northern wheat fields is a very useful implement. The average yield of rice to the acre in Georgia is 800 pounds. Some well-authenticated yields of upland rice are: 100 bushels or 4,300 pounds to the acre in Hall and White counties of Northeast Georgia, Pike county of Middle Georgia, and Early county of Southwest Georgia. The present production of rice in the United States falls far below the needs of our people. In some seasons the imports are half as much again as we raise, sometimes they equal the domestic crop, and sometimes are even greater. Inasmuch then as the amount produced in this country falls below our own needs, there is room for great increase in the cultivation of rice. To men of enterprise and thrift wishing to embark in this business Georgia presents a promising field.

In 1900 Georgia produced 7,500,000 pounds of rice, a decrease of more than 50 per cent. since 1890.

Sugar-Cane.—Sugar-cane yields a handsome profit. A steadily increasing demand for sugar and molasses in the United State makes it certain that there will always be a ready sale for the product of the sugar-cane. Over large areas of the United States sugar and various syrups are being extracted from the beet cultivated for that purpose. But no other known plant equals the *sugar* or *ribbon-cane* in its capacity for supplying those two articles of universal consumption. When we consider that from 1880 to 1895 the United States produced only one-tenth of the sugar consumed in this country, and paid out \$1,500,000,000 for imported sugar, it can be readily seen that there is no immediate danger of overstocking the market. The 20,000 acres in Georgia devoted to the sugar-cane in 1890 produced 1,307,625 pounds of sugar and 3,223,194 gallons of molasses. Some of the best yields were: 700 gallons of syrup to the acre in Bulloch county; 695 gallons in Thomas county; 600 gallons in Brooks county, and 480 gallons in Burke county. Of these counties Burke and Bulloch are in the northern part of the Southern Georgia belt, while Brooks and Thomas are in the extreme south on the Florida line. In Rockdale county in Middle Georgia 600 gallons of cane syrup were the product of one acre of the farm of Hon. W. L. Peek.

The growing of sugar-cane and manufacture of syrup in South Georgia has doubled in two years. Twenty-five thousand barrels of syrup have been sold in one year from a small section of the extreme southern part of Georgia. In the fall of 1899 a gentleman in Tennessee sold 150 barrels of Georgia syrup in six days. A great deal of it has been sold to people in Cleveland, Cincinnati and Boston, who, after mixing it with glucose, put the blended article upon the market as Georgia White Syrup.

The planters are finding out every year that no country on the face of the globe can make as good syrup as Southwest Georgia, and are increasing their acreage. Before many years this industry will equal that of cotton. Pittsburg, Pa., is getting to be a strong market for Georgia syrup. The present estimate is that the sales of Georgia syrup in Pittsburg for the year will amount to 10,000 barrels. A sample of Georgia cane tested by Professor Wm. C. Stubbs of New Orleans, in 1899 showed $16\frac{1}{2}$ per cent. sugar content and not quite one per cent. glucose, with a purity coefficient of nearly 90 per cent. Another sample contained $13\frac{1}{4}$ per cent. sucrose (cane sugar), and only 1 and four one-hundredths per cent. of glucose, with a purity coefficient of 81 per cent. This means more than 12 per cent. of sugar available in ordinary mills, and upon a 75 per cent. extraction would be equivalent to 180 pounds of C. P. sugar to the ton of cane, or nearly 200 pounds of commercial sugar as usually made in Louisiana sugar-houses from firsts, seconds and thirds. The better grade of lands with ordinary cultivation and fertilization will yield from twenty to twenty-five tons to the acre, and the same land under the best methods will yield from thirty-five to forty tons to the acre.

Professor Stubbs, already mentioned, is authority for the statement that the price per ton of sugar-cane in Louisiana will average about 80 cents for each cent that prime yellow clarified sugar is worth on the New Orleans market.

Hence, if prime yellow clarified sugar is worth five cents a pound, the price for a ton of cane will be five times eighty cents, or four dollars a ton.

The number of gallons of syrup that can be obtained from a ton of Louisiana cane will depend entirely upon the extraction of the mill and density of juice. A mill getting as high as 75 per cent. extraction, or fifteen hundred pounds of juice to a ton of cane, will give from twenty-five to thirty-five gallons of syrup cooked to a density of 34 degrees Baumé. The variation is due to the "total solids" contained in the cane juice. The same statement will apply to Georgia cane.

A complete plant for making syrup can be obtained at several places in the United States. But probably the most improved machinery can

be better obtained in New Orleans, where every manufacturer is familiar with its practical use. For an up-to-date factory there is needed a first-class mill with filter presses, clarifiers and evaporators. There are also needed settling tanks, juice tanks and syrup tanks.

Any one who contemplates embarking in the business of syrup-making, should study the question of sterilization of syrup, which can now be easily done. The syrup, after being sterilized, must be put into sterilized vessels, where it will keep indefinitely, if the work has been well performed.

Soils adapted to cane are those naturally rich and fertile, though upon soils of very moderate fertility, well prepared and fertilized, remunerative crops can be grown. In cane culture climate, rainfall and manures are more important factors than soils. In sandy soils without manures the cane is small. Calcareous soils develop a superior cane, rich in saccharine matter. On rich alluvial soils, not properly drained, the canes are poor in sugar produce, and though they yield a large quantity of syrup, it is not a first-class article.

As to whether the entire cane should be planted or only that portion which is the least fitted for making sugar Dr. W. C. Stubbs of Louisiana says: "It can be positively asserted that the upper third of our canes can be profitably used for planting our crop, and we can send the lower two thirds of our entire crop to the sugar-house, thus increasing largely our sugar yields and diminishing our heavy outlay annually for seed."

Before planting all soils should be well-prepared, properly fertilized, and perfectly drained. It is best to break or flush the land, then bed into rows from five to six feet wide; then open the bed and in this furrow plant the cane. The part of the stalk selected for seed should be deposited in an open furrow and well covered. In the fall this covering should be several inches thick. Remove the extra soil in early spring to secure early germination. The cultivation best for corn land is generally good for sugar-cane. Let there be thorough and deep preparation of the soil; then cultivate rapidly and as shallow as the soil will permit, and "lay by" when canes shade the ground.

The fertilizers for cane should contain enough nitrogenous matter to insure a large growth by September 1st. Phosphoric acid is very beneficial to cane. Potash may be demanded upon light sandy soils. Experiments have shown that the limits of profit in the use of fertilizers are between forty and fifty pounds of nitrogen obtained from cottonseed-meal, and from forty to eighty pounds of phosphoric acid.

If under favorable conditions the above formula is used on our best



HARVESTING RYE.

cane lands in South Georgia, we should obtain from twenty to thirty tons of cane to the acre.

It should be remembered that Georgia was the original cane-growing State of the Union. In 1825 she gave to Louisiana the seed of the ribbon-cane, thus bequeathing to that State a mine of wealth. And now the genial soil of Southern and Middle Georgia offers this same source of wealth to her own people or to the stranger seeking a home within her gates.

The establishing of sugar refineries will greatly promote the interests of the cane growers. There will be no scarcity of capital for such enterprises if sufficient quantities of cane are grown. We predict for the near future the establishment of a number of sugar refineries in South Georgia.

Syrup-making in Georgia commences about the last of October or the first of November, and continues until Christmas. At this season the traveler journeying on a country road will see on almost every farm the smoke issuing from the syrup furnace, an invitation to either neighbor or stranger to enter the home and share the hospitalities to which every one is made to feel welcome in cane-grinding time. Here youths and maidens, with those of riper years, engage in the sports of the holiday season, or seated near the cheerful fire regale themselves with the healthful and delightful beverage extracted from the sugar-cane. At this season of cane-grinding and syrup-making, the sick and feeble recuperate and often find their health again. The negroes, too, both young and old, have their part in the good cheer, and even the stock upon the farm share in the general glee.

The stalks of the cane shredded are worth more as forage than corn-stalk or cottonseed-hulls.

The little, old-time sugar mill on each man's farm ought, in this progressive day, to give place to well equipped, up-to-date syrup mills and sugar refineries. This would transfer the syrup-boiling and sugar-making to the mill, just as cotton is taken to the factory, and not spun upon each farm.

If the most improved methods are used, the cost of extracting the juice from the stalks and converting it into syrup is a mere fraction of a cent per gallon.

It has been estimated that the average farmer can count on getting \$120 gross to the acre for syrup, at a general average product of 600 gallons to the acre.

In 1890 the area devoted to sugar-cane in Georgia was 20,238 acres,

which produced 1,307,625 pounds of sugar and 3,223,194 gallons of molasses.

In 1890 the area devoted to sorghum in Georgia was 22,089 acres, which produced 1,342,803 gallons of molasses.

CASSAVA.

Recent experiments go to prove that cassava will make a profitable crop for South Georgia. The species of this plant recommended for Georgia, is the sweet cassava, which does not, like the bitter cassava, require boiling to drive out poisonous juices, but can be fed to stock in its natural state without risk of harm. It also makes a very palatable table vegetable. But its chief excellence consists in the fact that it yields abundance of the best starch. One acre of South Georgia land planted in sweet cassava will yield 4,000 pounds of starch, while the best corn or potato lands in Illinois or Michigan can produce only 1,200 pounds of starch from these vegetables.

Cassava is easily propagated by cuttings of the stem and grows rapidly, attaining maturity in six months. The production is at least sixteen times that of wheat.

When the farmers of South Georgia become thoroughly convinced of its worth and embark extensively in its cultivation, starch factories will be started on every hand. It has been estimated that these will pay five dollars a ton on the cars, at any station within one hundred miles of their factory.

With sugar-cane and sugar refineries, cassava and starch factories, South Georgia possesses grand opportunities for profitable farming.

GRASSES AND FORAGE CROPS.

If it be true that the farmer's only capital is his land, how important it is for him not only to preserve his capital but to increase it year by year. There is no surer or easier way to do this than by growing the grasses.

The value of the hay crop of the United States exceeds that of the cotton crop by more than fifty million dollars. The present race of planters grew up under a condition of things which looked to cotton as the sole market crop and since grass was the deadliest enemy to cotton the energy of the planter was directed to the complete extirpation of all the grasses of the field. But in recent years new light has dawned upon our progressive farmers, and in every section of Georgia the grasses and for-

age crops are receiving, to some extent, the attention which they deserve. While we recognize cotton, when cultivated upon a true business basis, as a great source of wealth to Georgia, yet we must remember that its culture is attended with great expense, since it requires constant attention and work from January to January. This labor largely consumes the profits, whenever cotton sells below seven cents a pound. If we look upon an agricultural map of the United State, we shall find that lands sell at the highest price in those States, or parts of States, where the grasses and forage crops are cultivated with the greatest attention. On the other hand we shall see that lands sell cheapest in these States or parts of States, that raise all cotton and kill all grass. Hence we conclude that the value of land increases in proportion to the attention given to the grasses and forage crops. If we turn to Europe, we find a similar state of affairs.

Spain grows practically no grass and has cheap lands, while Holland is known as a vast grass meadow, and some of her farm lands sell at \$800 or \$1,000 an acre.

Therefore, every farmer who wishes to enhance the value of his land should give attention to the cultivation of the grasses and forage crops. Georgia is rich in native grasses, and it has been fully demonstrated by some of our intelligent, wide-awake farmers that the artificial or foreign grasses also thrive well in Georgia soil. In fact, when we consider the entire year, Georgia and other States of the South offer better advantages for these crops than the North. While Georgia's acreage in hay is small compared to that of States which make it one of their principal crops, yet she ranks high in her average yield to the acre. Georgia's acreage in hay has not quite doubled since 1890, but her yield has more than doubled. Her hay crop for 1900 amounts to 190,237 tons, being an increase of 120,468 tons over that of 1890.

Alfalfa, or lucerne, is cultivated to some extent in Georgia, although it has not received the attention that its merits should claim. Among all the forage plants it stands unrivalled for abundant yield, longevity and hardness. It flourishes under heat that would destroy any other species of clover. Over the entire plant are scattered purple, pea-like flowers, in long, loose clusters or racemes. It is not affected so much by altitude as by the depth and warmth of the soil, and the depth of the water-table beneath the surface. A rich, sandy loam, limy, with a porous subsoil, suits it best. A considerable amount of sand in the soil is not injurious to it. It will grow on favorable soils at almost any altitude, from sea level to 7,000 feet above the sea.

Alfalfa, when young, is very delicate and requires much nursing. No

crop requires more careful preparation to secure a good stand. But when it is planted upon suitable soil, and a good stand is obtained, it may yield luxuriant crops for thirty or more years. It rarely grows tall enough the first year to be mowed for hay. It reaches its best growth during the third year. When properly managed up to that time the number of cattle, which one acre of it will keep by soiling throughout the whole season, is something wonderful. While this is a good grass for hay, it is not good for pasturing. The trampling of stock compacts it so much that the plants deteriorate. Hogs, however, do not injure it like heavier stock. Hence it may be used as pasture for them, and one acre will furnish abundant forage for from ten to twenty hogs throughout a season.

Bermuda grass is perennial and is the most valuable for pasturage of any grown in the Southern States. It can endure the greatest amount of summer heat, and its growth is not arrested by droughts that threaten the vitality of all other grasses. It does not propagate grass by seed, except to a limited extent. The best means of propagating it is to cut pieces of the turf and scatter it along shallow furrows, or sow it over the land well prepared by plowing and harrowing, and cover or compress the roots into the soil with a roller or drag brush; or the plants can be gathered, root and branch, from any patch of ground covered by them, and, after being shaken free from earth, passed through a cutting-box, as though being prepared for the stall. Then sow these little cuttings by hand broadcast before the harrow in the spring of the year. Every joint will germinate and bud. When Bermuda grass is once thoroughly rooted it spreads rapidly and soon takes possession of a field. Being extremely difficult to exterminate, it should not be planted on land intended for tillage. But Rev. C. W. Howard, who was in his life-time a well-known writer on grasses, thought it very doubtful whether any acre of land in the South thoroughly set with Bermuda grass was not worth more than with any other crop that might be grown upon it.

"A good Bermuda sod," says a writer in the *Southern Farm Magazine*, "will yield an almost incredible amount of pasturage that cannot be grazed out by the severest treatment in the hottest summer drought. Bermuda is highly esteemed for hay, wherever it grows to a sufficient height for mowing." It must be cut early and often to make good hay. When left until the culms harden, it will not do for feeding. To make good hay and make the largest yield, it should be mowed from three to five times every summer.

Under the Bermuda sod large numbers of earthworms may be found. These add fertility to the soil, and when in summer hogs are turned into



SUGAR-CANE FIELD.

the pasture, the worms and grass combined make a fattening food which they much enjoy. Bermuda grass will not bear dense shade, but thrives best where most exposed to the sun.

On the same fields where cotton grows best Bermuda grass is most thriving. A grass which affords such excellent pasturage for cattle is capable of carrying also large flocks of sheep. There is no reason why the cheapest wool should not be produced on the same lands that produce the cheapest cotton. It has been estimated that one acre of Bermuda grass on soils entirely suited to its growth will, in many parts of the South, maintain ten sheep for ten months of the year. Bermuda grass pastures in Georgia, supplemented by pasture of winter grasses, suitable for grazing sheep, would add to our people another source of untold wealth. If Georgia should become a great wool-growing, as well as cotton-growing State, who can measure the degree of her prosperity? With cotton and wool, two of the most important fibers for clothing that the world produces and manufactures, our people would double their present opportunities for acquiring wealth. Dr. Thomas P. Janes in his "Hand Book of Georgia," in order to illustrate the fertilizing effects of a Bermuda grass sod of long standing, mentioned the following results obtained by Colonel A. J. Lane in Hancock county: "The first year after breaking the Bermuda sod he harvested 1,800 pounds of seed cotton to the acre, the second year 2,800 pounds. His third crop, corn, manured with cottonseed in the usual way and quantity, yielded sixty-five bushels to the acre. The fourth year he harvested forty-two bushels of wheat to the acre. Neither the cotton nor wheat was fertilized. On this same land oats or wheat may be sown after the corn. If Bermuda sod is torn up by the plow, and after harrowing, but before rolling, blue grass seed, white clover and hairy vetch are sown, a pasture of the highest capacity for both winter and summer will be obtained. As the Bermuda dies down in the late fall, the blue grass and white clover appear, giving pasturage in the winter. As the summer approaches, the reverse of this occurs.

It will be well to bear one thing in mind. The cultivation of artificial grasses is accompanied with more or less expense. But Bermuda is within easy reach of the poorest farmer.

The celebrated *blue-grass* of Kentucky and Tennessee is used in considerable extent in Georgia for lawns and yards, and thrives very well in some of the soils of the State. The Texas blue-grass, which, as its name indicates, is a native of the Lone Star State, is a hardy perennial and has a vigorous growth. Fertile soils, especially calcareous loams, will produce this grass in great luxuriance. It is an excellent pasture grass for

the extreme south, and remains green throughout the year, growing through the winter months and blooming in the latter part of April or the first of May. It also is well adapted to Georgia.

Meadow oat grass is excellent as a winter pasture grass. It will grow on more sandy soil than most of the artificial grasses; but rich upland is the proper soil for it. It is good not only for winter pasturage, but also for hay. It matures so rapidly that seed sown in the spring will produce seed in the fall. Since the seed becomes ripe, even while the stalk is green, it can be saved by cutting off the heads with a cradle and tying in bundles, after which the rest can be mowed for hay. Cattle should not graze upon it in summer and fall. After Christmas they can feed upon it until the latter part of February, or even later, until the other grasses spring, unless it is designed to make hay of it.

Orchard-grass, so called because of its growing wild in orchards or in thinned woodland, is next to the tall meadow oat-grass for winter pasturage or for hay. In order to be sweet and nutritious it should be cut as soon as it blossoms.

Crab-grass is indigenous. It is never sown, but, wherever cultivation ceases, takes possession of the fields. It forms an excellent pasturage through the summer and until late in the fall. It grows very rapidly after oats, and if cut when in flower, gives a very large yield of hay, and sometimes yields more forage than the oat crop that preceded it. This grass sends out numerous stems, branching at the base, but forms no sod.

Crowfoot grass is confined to the lower and sandy part of Georgia. Both this and crab-grass should be cut as soon as they are in blossom.

Crimson or scarlet clover is an annul, and grows to the height of three feet on good soil. It should never be fed to stock after the crop has ceased flowering, and the practice of feeding stock with the straw after it has been raised and threshed as a seed crop should be avoided. It makes excellent pasture during the fall months, when other green crops have dried up. For green manuring it ranks high. Having made its growth during the fall and winter months, it can be turned under in the spring. It should always be sowed alone, as it needs all the land. It is excellent food for milch-cows, since it causes a full flow of rich milk. A rich clayey loam containing more or less carbonate of lime, and yet not a calcareous loam, suits it best. After the clover has been cut in the spring the same field may be planted in corn.

Red clover thrives on land of moderate fertility, such as will produce remunerative crops of wheat or corn. With the right treatment red clover will succeed in Georgia. It has been tested with successful results

among the mountains in Middle Georgia, and on the coast, notably on Hutchinson's Island, opposite Savannah. In all of these localities there have been fine cloverel fields. Though lucerne is superior to it in the quantity and quality of its hay, yet red clover does make good hay and in great abundance, with the additional advantage that it is splendid for pasturing, while lucerne cannot be grazed, and cannot form part of an ameliorating rotation of crops. The suitable soil for clover is one which contains a large percentage of clay. Extremely sandy soils will not do. But where the surface is sandy, if there is a clay subsoil, the clay may be brought to the surface and manured. A good wheat soil is generally a good clover soil. The subsoil for clover must be dry, because it will not thrive on wet lands. But it will thrive on bottom lands that have been thoroughly drained. Captain C. W. Howard, in his "Forage Plants at the South," published in 1881, says: "Clover should be cut for hay as soon as a portion of the heads begin to turn brown. Earlier than this it is too watery, later it is too woody. . . . The great object is to cure it as much as possible in the shade. The hay when cut at the proper time, and cured in this way, will be of a nice green color, with all the leaves and blossoms attached. . . . No live stock should be turned upon a clover field, until the clover is in blossom. The temptation to violate this rule is very great. Clover springs so early and our live stock is so hungry, that the inducement is very great to put them upon the clover before the proper time. But it would be less costly to buy food than to do this. By too early pasturing the clover is killed out, and it is then said that clover will not succeed at the South. Precautions should be taken in turning horses or cattle into a clover field. If they are hungry at the time, they would overeat themselves and the result is an attack of what is called hoven. The animal swells, and often in a short time dies. To prevent this, live stock turned into a clover field should previously be fully fed; they should not have had access to salt within twenty-four hours; they should not the first day remain more than half an hour, and the dew should have been dissipated."

White clover in the South will grow tall enough to be cut by itself, which is not the case in the North. In the spring it affords excellent pasture for hogs, sheep and cattle. It is also good for horses until the blossoms fall, when it salivates them. This is also true of the second crop of red clover. In England white clover is much valued on account of its manurial properties.

The fescue grasses are perennial and are strongly recommended for worn-out soils and hill-sides. They grow well on dry, sandy soils, have a creeping habit and make good turf.

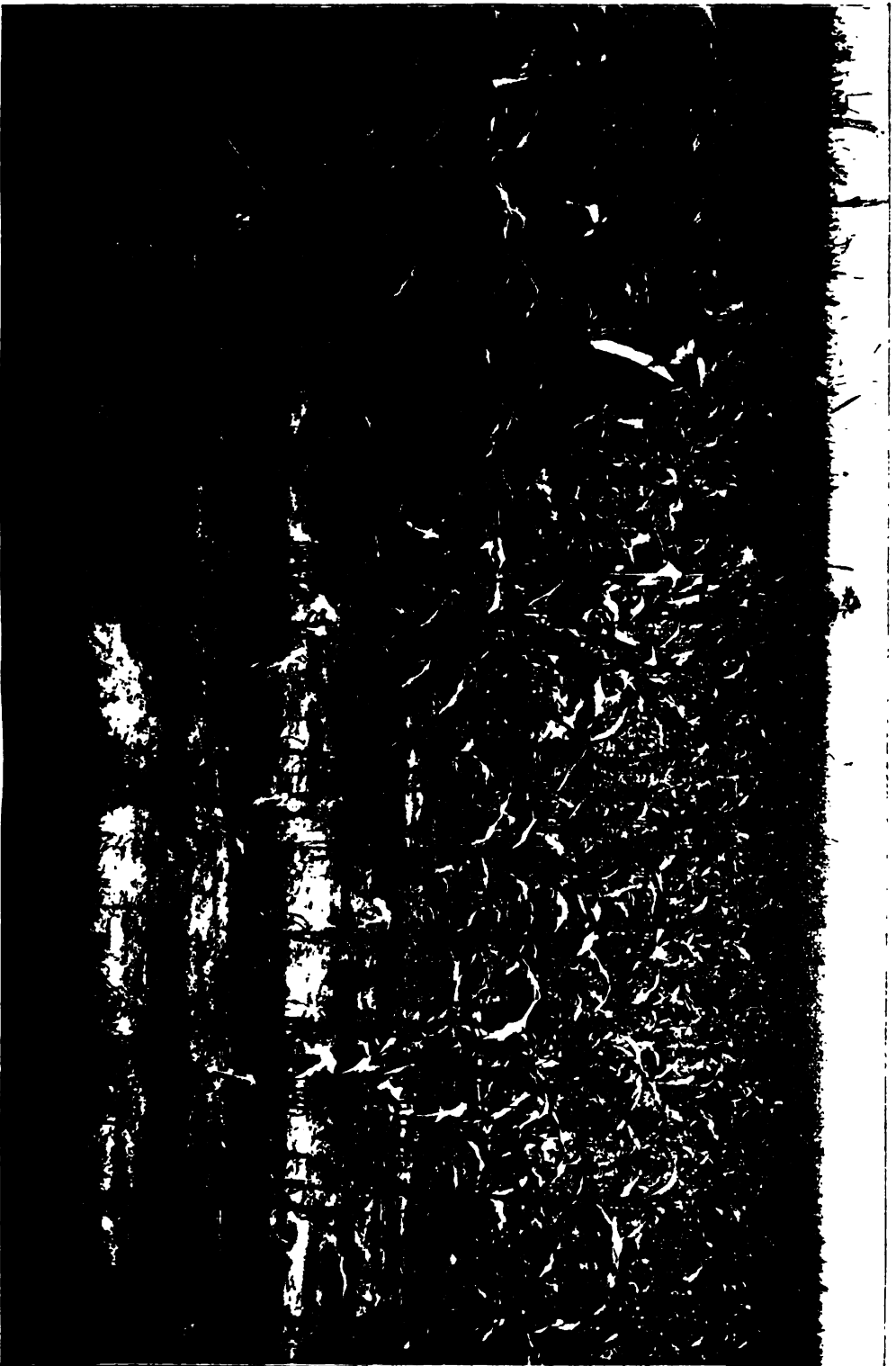
Italian rye-grass is short-lived, having a duration of two or three years. It grows best on rich, moist alluvial lands and calcareous loams. It is a very valuable grass when early forage is desired. Indifferent to climate and texture of soil, it requires only dryness and richness. It grows successfully in every part of Georgia. If sowed in August or September it will be ready for grazing in February. Although it yields largely for hay or winter grazing, it is doubtful whether it be more valuable than barley or rye for these purposes.

Cow-peas and *peavine* hay have come into universal favor in all the Southern States. Up to about thirty years ago their cultivation was confined mainly to the cotton-growing States, but now they are a staple crop even in the border Southern States. They have in many localities taken the place of clover, and may appropriately be called the clover of the South. The pea-vine is a leguminous plant and appropriates nitrogen from the atmosphere, as do all other plants of the same family. The vine and peas supply as much humus to the ground as clover, and can be grown upon soils, in which clover would wither and die. The peas can be sown in Georgia at any time between April 1st, and August 1st, and the soil may be prepared by breaking it with a two-horse plow. About one bushel and a half to the acre should be sown, after which the ground should be well-harrowed. Some farmers prefer to drill the peas in rows, from two and a half to three feet apart, placing the peas at intervals of one or two inches in the row. After they have come up a cultivator should be run between the rows. Peas furnish a large amount of feed if planted between the corn rows at the second or last plowing of the corn.

The hay should be cut when the first pods begin to turn yellow, and while the leaves are yet green and the stems tender. If cut after all the peas have thoroughly ripened, the stalks will be hard and the leaves will fall off. They should be cut in clear weather and after the dew is off. There are many varieties of the pea. Those commonly used in Georgia are the whippoorwill, the black clay, the red clay and the unknown. There is no better soil renovator than the cow-pea. The most worn-out soil can be brought to a condition of profitable production by planting a succession of cow-peas upon it.

Valuable as is the pea-vine for food, its chief excellence is this property of restoring exhausted soils. It surpasses, perhaps, all other leguminous plants in producing maximum results in a minimum of time. In Georgia cow-peas are planted in the late spring or early and middle summer, and the crops of vines are either harvested for hay or buried for fertilizing in the early fall. The more economical plan is to harvest the crop

FIELD OF BROOM-CORN.



for hay, then turn under the stubble and the roots, which are said to contain the greater part of the elements so essential for the renovation of the soil.

The *vetch* is found in two varieties, the winter and summer vetch. The latter is of very little use to us in Georgia, because it will not for summer soiling yield as large an amount of green forage as corn. Since the winter vetch is ready for the first cutting during the first warm spell in February, it is very useful for soiling early in the spring. The seed should be sown early in August, allowing one bushel to the acre. Where land has been well manured, the vetch or tare yields a large amount of early cut food, or it may be made into nutritious hay, or may be used as a winter pasture.

Eight varieties of *millet* have been cultivated in this country. It is used for soiling purposes, for hay and for its seed. More than fifty bushels of seed to the acre have been raised on rich land. The hay made from it is of good quality and large quantity. But Captain Howard says: "For forage purposes it is not superior to oats and is inferior to the vetch. It is an annual."

All the millet family requires a strong, rich, deep soil, sufficiently clayey to retain a large amount of moisture; but at the same time the land must be thoroughly drained. The most favorable conditions for the growth of a large crop of millet are a clayey soil in a moist situation, enriched by the application of well-rotted stable manure, kept in good tilth and thoroughly prepared by frequent plowings or harrowings. Millet must be cut as soon as it begins to head and before it blooms.

Gama or Sesame grass is one of the largest and most beautiful perennial grasses grown in Georgia. It is a native grass and is found throughout the South from the mountains to the coast, reaching often a height of seven feet. The seed break off from the stem as if in a joint, a single seed at a time. The leaves are very much like those of corn. Horses and cattle are fond of the hay, which may be cut three or four times during the season.

Herd's-Grass is the most permanent grass for all soils. It is a universal feeder and is therefore of special value to every farmer. It is a good meadow grass and one of the best pasture grasses. When it has been cut for hay, its aftermath makes excellent late summer and fall pastures. It may be sown in the fall or in the spring. It may be sown alone, or with wheat, barley, rye, or oats. It is often sown with other grasses, as timothy and clover. This herd's-grass is known in New England as red-top.

Timothy, sometimes called cat-tail, is also called herd's-grass. It is useful only for hay. The well-drained rice land of the Georgia coast will produce it in perfection, as will also the richest of bottom land that is dry enough for wheat. It should be cut when in full bloom.

Brome, cheat and rescue grasses, belonging to the same family, make a very good winter pasturage, but are liable to some objections.

Peanuts or ground-peas, which when parched, are so much relished by young and old, and have such ready sale everywhere, are also fine forage for cattle and hogs. The white peanut grows with spreading branches that lie flat upon the ground; the red has an upright growth. Spanish peanuts are earlier than other varieties and have an upright growth like the red. This is the surest crop of the three. Those grown in the far south are valuable for making peanut oil. The harvesting must always take place before frost. The usual yield to the acre is from thirty to fifty bushels, though sometimes as high as a hundred bushels are made. When carefully harvested before frost the vine makes an excellent food for cattle and sheep. Ewes in lambing time can have no better food given them than well-cured peanut hay, because it increases the flow of milk and adds richness to it.

Corn, when desired as a forage crop, is planted very close together, and on rich and well-prepared soil, makes an enormous yield. The whole crop is cut while yet green and tender, and properly cured. If desired as ensilage it is cut up green and deposited in a silo pit.

Cane forage is prepared from the sorghum cane, grown in the same way as the corn forage, and gathered and cut up in the same manner.

The millets, or any of the grasses, including peavine and peanuts, may be gathered green and stored in the silo.

The Soja bean ranks among our best crops, both as an improver of soils and as food for stock, as will appear from an analysis taken from the United States Agricultural Department:

AS A FOOD

SOJA BEANS	Protein Per Cent	Fiber Per Cent	N. Free Extract Per Cent	Fat Per Cent
Green fodder.....	4.0	6.7	10.5	1.0
Dry fodder.....	14.4	22.3	39.6	5.2
Grain.....	34.0	4.8	23.8	16.9
COW PEAS				
Green fodder.....	2.4	4.8	7.1	.4
Dry fodder.....	16.6	20.1	42.2	2.2
Grain.....	20.8	4.1	55.7	1.4

AS A FERTILIZER

	Nitrogen Per Cent	P. Acid Per Cent	Potash, Per Cent
Soja beans	2.32	.07	1.08
Cow peas	1.95	1.05	.52

As you will understand *protein* furnishes the materials for lean flesh, blood, muscles, hair, wool, albumen of milk, etc., and is a very important ingredient of all feeding stauffs. *Fiber* is the framework of plants. The coarse fodders, as hay straw, contain a large proportion of *fiber*, hence less digestible. *Nitrogen free extract* includes the sugar, starch, etc., and forms an important part of stock feed, especially the grains. *Fat* includes besides real fats, wax, the green coloring matter of plants, etc. The culture of the Soja bean is very much like that of cotton. The rows should be from three to five feet apart.

Arctic, or rescue grass thrives best in North Georgia and is held in high esteem by some of the farmers of that section. It will readily yield from 1,500 to 3,000 pounds of hay to the acre. It can be sown in July with peas, or in August, September and October. If sown then it makes a fine winter pasturage, and cattle can be kept upon it until the first of March without injury to the crop, which can be cut from May 15th to June 15th. But the rescue grass (*bromus inermis*) must be carefully distinguished from cheat (*bromus seculinus*).

To show what can be done with the grasses and forage crops in Georgia, we give the following trustworthy reports of the work of some of our best farmers: In Bibb county on the border of Middle and Southern Georgia there were cut 8,046 pounds of crab-grass hay to the acre; in Gordon county in Northwest Georgia, 9,400 pounds of lucerne to the acre; in Greene county in Middle Georgia, 13,953 pounds of Bermuda grass hay to the acre; in Spalding county in Middle Georgia 10,720 pounds of pea-vine hay; while of clover hay there were cut in Greene county, Middle Georgia, 10,000 pounds to the acre; in Cobb county 6,575 pounds to the acre, and in DeKalb county 16,000 pounds to the acre, both of these last two counties being in Northwest Georgia on or near the northern line of the Middle Georgia belt.

Greene county reports a yield in corn forage of 27,130 pounds to the acre.

The hay crop of Georgia in 1900 was 190,237 tons, valued at \$2,425,522. The area devoted to this crop was 112,566 acres, and the average yield per acre for the entire State is 1.69 tons, or 3,380 pounds.

Again we say there is no industry that will make so much money to the

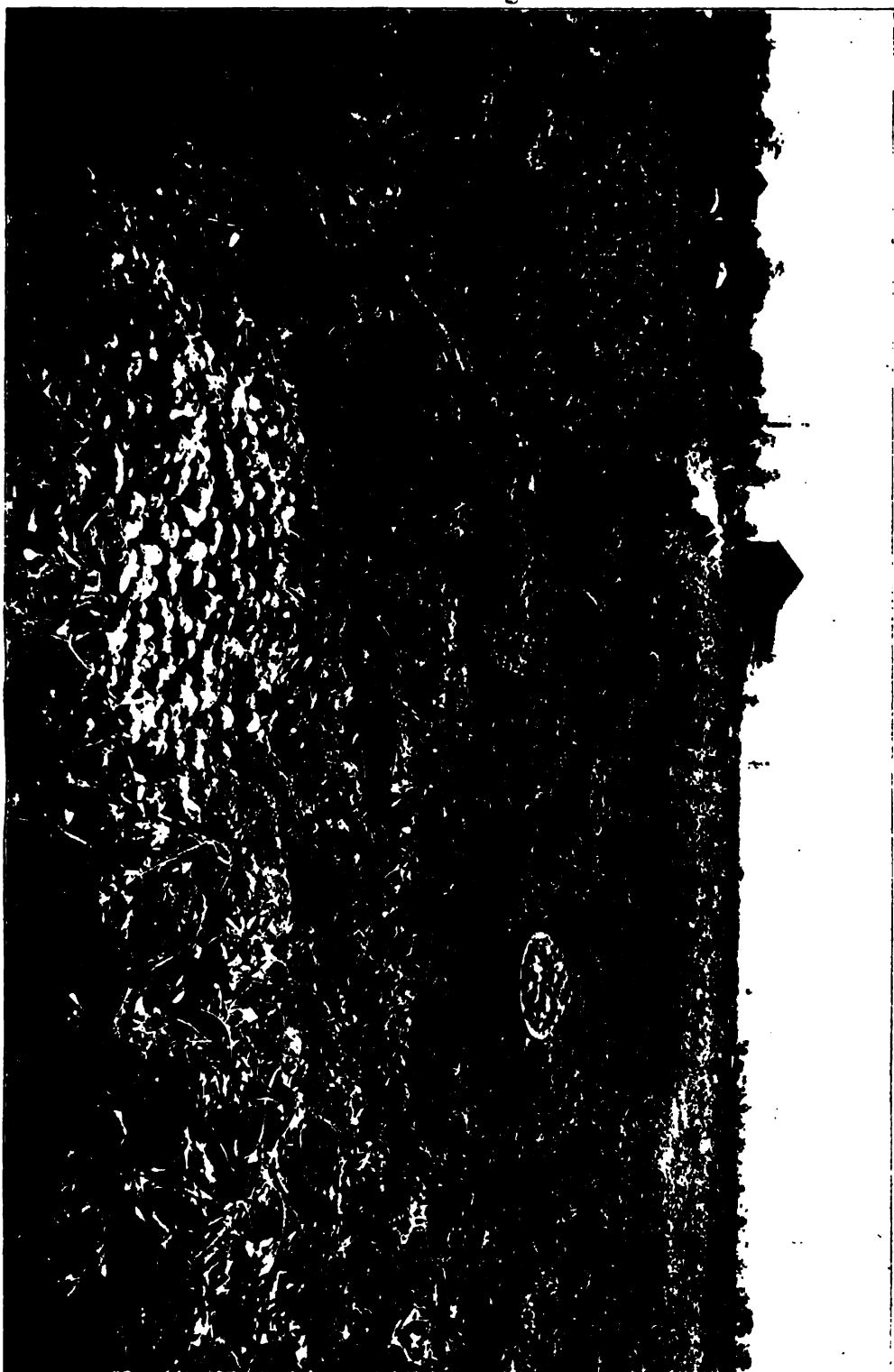
farmer at such small outlay of expense and labor, as the cultivation of the grass and forage crops. We give as an illustration of what can be done on this line in Georgia, the case of Mr. N. B. Moore, who lived in Augusta and was a gentleman well-known through all his section of the State. He was one of the pioneers who blazed the way to success in this important field. Soon after the disastrous close of the civil war he devoted himself to grass culture, planting nothing else on his farm of one hundred acres of Savannah river land, near Augusta. From these one hundred acres he derived an income of from seven to ten thousand dollars a year. When the season was propitious his land afforded three or four cuttings. His barn held two hundred and fifty tons of hay. He made it a rule that the grass cut at noon should be put up with horse sulky rakes, in cocks, before sundown. Perhaps it is not inappropriate to say that he believed strongly in paint for the preservation of every tool, and that after more than twenty years of use his wagons, carts and harrows were perfectly sound. The citizens of Augusta and Richmond county, who knew of his wonderful success, were prepared to give considerable credit to his expressed opinion that "farmers, as a class, to be successful, require more brain than any of the so-called learned professions."

The success of other farmers who have embarked in grass culture has been so wonderful that there can no longer be a doubt in the mind of any one as to the adaptability of Georgia soil to this wealth-producing industry. What is better evidence of a well-managed farm than extensive fields of waving hay ready for the reaper, or the green carpeted meadow on which are grazing herds of sleek cattle suggestive of rich cream, milk and butter, or juicy steaks, and where the horses that enjoy its bounteous feast will compare favorably with the best bloods of Kentucky? The well-mowed lawn, too, that skirts the gravel walk and spreads out in front of the farmer's neat cottage or stately mansion, and through his grass and forage crops not only fills his barns with plenty, but also adds to his bank account the handsome profits that ac-
→ bears testimony to refinement, culture and good taste.

A farm and home like this are within the reach of the Georgia farmer who, devoting only a part of his land to cotton, raises his own supplies, crue from the sale of the vast surplus remaining after all the needs of himself and farm have been fully met.

POTATOES.

"The South is awakening to new industries, and broader fields of usefulness." The good work is going on with increasing impetus in this



DIGGING POTATOES.

year of grace, 1901. Georgia is progressing on all lines. In this chapter, however, we are speaking of diversified farming.

The potato crop is another source of wealth to Georgia. Both Irish and sweet potatoes make good yields; but the acreage and production of the latter are much larger than of the former.

The Sweet Potato.—In sweet potatoes Georgia comes just behind North Carolina, which State ranks first in this product. The soil is well adapted to their culture, and when the season is propitious the yield is very abundant. Not only is this a favorite crop for home consumption, but great quantities are exported to the northern States. In some sections they are used also for fattening hogs. The average yield is 78½ bushels to the acre. Very large yields have been reported from some of the best farms, viz.: 800 bushels to the acre in Berrien, Crawford and Richmond counties; 500 bushels in Brooks county, and 400 bushels in Fulton county. Of these counties Brooks is in the extreme southern part of Georgia, Berrien just north of it, Crawford partly in southern, partly in Middle Georgia, Richmond and Fulton in Middle Georgia, the last on the edge of Northwest Georgia. By the census of 1890 the production of sweet potatoes in Georgia was 5,616,317 bushels, worth \$3,250,000, raised on 71,399 acres. No report has yet been received of the acreage and production of sweet potatoes in Georgia for 1900.

The Irish Potato.—At one time the Irish potato crop was entirely for home consumption. The demand for early vegetables in the northern markets is such that it has caused a great increase in the cultivation of Irish potatoes, and the truck farmers of Georgia have not been slow to take advantage of this fact. Ordinarily two crops are made in the year, and there is one instance of a gentleman in Decatur, Georgia, who raised three crops in one year. Taking the average of all lands, good and bad, the yield is 74½ bushels to the acre, something less than the average of sweet potatoes estimated in the same way. But as many as 420 bushels to the acre have been raised in Wilkes county, Middle Georgia, and 109 bushels to the acre in Walker county, among the mountains of Northwest Georgia.

There is no need to be apprehensive about an overproduction of Irish potatoes in Georgia. Like all other crops of vegetables, berries and fruits the Georgia products are so much earlier upon the market, that they preclude all competition. Our Irish potatoes command the early and best prices and the Georgia truck farmer cannot be forced out of the market by his Western or Eastern neighbors. In April, 1895, a truck farmer of South Georgia shipped to the Eastern markets one hundred and fifty

barrels of potatoes, which brought him \$7.50 a barrel or \$1,125.00 The production of Irish potatoes in Georgia for 1900 was 391,816 bushels, valued at \$301,698. These were raised on 5,762 acres. This is a falling off in acreage and production from 1890, when 431,008 bushels were grown on 5,791 acres.

Tobacco has never been a staple crop of Georgia. Yet it can be grown with great success. Many farmers have cultivated it for their own use, and some have made a good profit by its cultivation and sale. Improved facilities for harvesting, curing and marketing it will greatly increase its production. The type of tobacco depends upon climate and soil. Rich lands give one type of tobacco, while other lands, almost useless for cereal crops, yield a tobacco very valuable for color and flavor. Of course the culture and curing of the plant have great influence on the quality. The plant is first raised in seed beds and when large enough transplanted like cabbage and tomato plants. The land used for the crop must be well plowed and harrowed. Before setting out the plants, the land must be marked three feet or more apart each way, and hills or ridges must be made at the intersection of the marks, and in these intersections the plants are set out as soon as warm weather is assured.

A German farmer in Dodge county who tried tobacco-raising reported that he raised on one-twentieth of an acre 160 pounds of Sumatra leaf tobacco. He was offered \$80.00 for the crop, which would be at the rate of \$1,600 to the acre. In Decatur* county, about eight miles from Bainbridge, is a tobacco farm of 600 acres, which yields the famous Sumatra tobacco of the finest grade.

By the census of 1890 the area devoted to tobacco in Georgia was 800 acres, which produced 263,752 pounds, or 329.69 pounds per acre.

In 1900 Decatur county alone produced more than the whole State of Georgia in 1890.

*See account of tobacco farm in Decatur county in the sketch of that county.

AGRICULTURAL PRODUCTS OF GEORGIA IN 1900.

	Bushels.	Value.
Corn	34,119,530	\$19,448,132
Wheat	5,011,133	4,760,567
Oats	7,010,040	3,434,920
Rye	109,529	112,815
Sweet potatoes		
Irish potatoes	391,816	301,693
Hay	190,237 Tons	2,425,522
Cotton	1,845,699 Bales	48,024,822
By products of cotton		14,000,000
Rice	7,500,000 pounds	375,000
Sugar-cane	No report received.	
Tobacco		
Peanuts		
Apples		
Peaches		

CHAPTER VII.

TRUCK-FARMING.—HORTICULTURE.

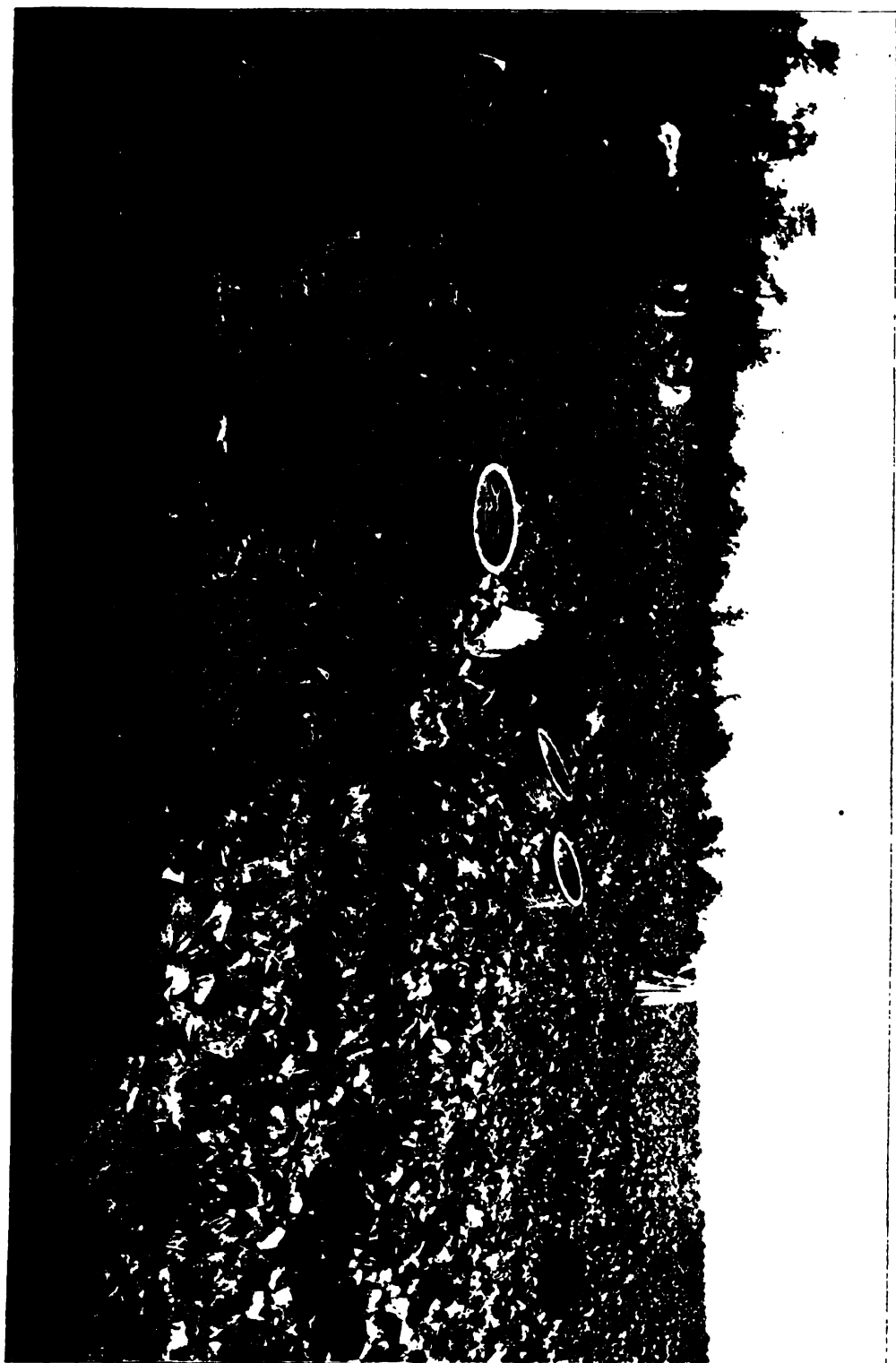
TRUCK-FARMING.

Truck-farming has long been one of the industries of Georgia. Before the civil war there were in the neighborhood of our cities and large towns market gardens, where vegetables were raised for sale in the markets and upon the streets, and it is well remembered by many that an important part of the cargoes of vessels sailing from Savannah were early fruits and vegetables for Philadelphia, New York and Boston, which were raised not only near Savannah, but all along the lines of railroad that centered in Georgia's chief seaport. Augusta, even in those days was one of the points from which melons, fruits and vegetables found their way northward, either by rail or by steamer from Charleston and Savannah. Immediately after the close of hostilities between the North and South, there was a great revival of this business, and new men entered into this inviting field. From year to year there was a steady growth, until at the present time, not only in the neighborhood of cities and towns, but near even little railroad stations along all the great lines of transportation that traverse all sections of our State, market gardens have multiplied and trucking has reached those proportions, which entitle it to rank among the leading industries of Georgia. The vicinity of Savannah is still one of the chief centers of the trucking business. The soil is well adapted to the raising of fruits and vegetables, and the climate is so mild that one crop or another can be grown almost every month of the twelve. Major Garland M. Ryals, who moved from Virginia to Savannah soon after the war, has accumulated a fortune in trucking. From one acre he gathers 400 crates of cabbage, selling them at \$1.35 a crate or \$540.00 for the product of one acre. After the cabbages have been gathered, he raises a crop of corn which brings him \$30.00. Then he raises a fall crop of radishes, the sale of which, added to the other amounts, will bring the total income of one acre to about \$700 in one year. Another farmer near Savannah gathered over 500 bushels of cucumbers from a single acre, which sold for a little more than

\$540, bringing him an enormous profit. Another truck farmer sold from one acre \$400 worth of beets, a delicacy much in demand in the northern markets in the early spring. So mild is the season about Savannah, that lettuce can be grown in midwinter with only light covering of leaves or canvas during the cold spells. This product reaches the northern markets when most in demand. English peas constitute one of the most profitable crops. They are ready for the table at Christmas time, and being shipped to the eastern markets bring the highest price. One farmer reports a net profit from two acres of this crop of over \$600.00 in one season. The crop of tomatoes is so planted as to come in just when the northern supply is exhausted, and they always command good prices. One small farmer west of Savannah made \$250.00 net from less than one acre of tomatoes. At Bloomingdale, Meldrim, Guyton, Egypt, Oliver, Halcyondale, Dover and Rocky Ford, along the Central Railway, the lands are specially suited for trucking, and many farmers of that section have abandoned cotton for the more profitable truck crop. Mr. L. C. Oliver of Bloomingdale, gives an estimate of cost and profit by the acre on the Irish potato crop alone. His expense on one acre for fertilizing, seed, planting and working, gathering and freight was \$100.00. An acre produced 60 barrels at \$4.00 a barrel, amounting to \$240.00, or a net profit of \$140.00 to one acre. Fertilizing was the heaviest item of expense; but by this means his land is becoming permanently enriched. All truck farming enriches the land. In this famous trucking section lands can be bought at from three to fifteen dollars an acre, according to location in respect to towns and railways. Of course improved lands sell at a much higher figure.

The value of the trucking business of Chatham county amounts to \$225,000 a year; of Richmond county, \$85,000; of Bibb, \$35,000; of Muscogee, \$30,000; of Fulton, \$150,000.

These are the counties in which are the largest cities, viz.: Savannah, Augusta, Macon, Columbus and Atlanta. Brunswick, the Georgia port of the Southern and Plant systems of railway, is the center of a large trucking business, which in that vicinity has taken a great bound forward. All kinds of vegetables and early fruits do well there. The bottom lands of the rivers of Southeastern Georgia are admirably suited, after drainage, to celery, cabbage, potatoes, strawberries and other products. The sea-islands cannot be surpassed in healthfulness of climate, and with the advantage of the fish and shell-fish, the market gardener near Brunswick cannot fail to live well and prosper. With some vegetables as many as three crops can be raised on the same ground in one year. The value of the trucking business in the vicinity of Brunswick is \$50,000 a year.



Besides the more important centers already named are numerous towns and stations along all the railway lines of Georgia. Some of the counties with a large trucking business are: Houston and Burke, the product of whose market gardens is \$15,000 a year for each; Spalding county, with a product of \$16,000, and Macon county, with a product of \$12,000. While Eastern Georgia supplies the markets of the North and East, Middle and Northwest Georgia should supply Louisville, Cincinnati, Chicago and the northwest with early vegetables.

Men of intelligence and thrift here and there throughout Georgia have shown the great capacity of our soil for high cultivation. What has been done by some can be done by all with the same good skill and management.

Georgia is so famous for melons that this subject should not be closed without reference to them. The Georgia watermelon stands unrivaled, both in quality and quantity, and enjoys a national reputation. So extensive is its cultivation and so large its shipment and sales, that it ranks as one of the money crops of the State. One hundred thousand acres are devoted to its culture, and more than 10,000 cars are required to carry this fruit to market. As many as 316,000 melons have been sold in or shipped from Augusta alone in a single season.

Thousands of melons are consumed on the farms and in the cities and towns of the State, vast numbers of which were carried to their various markets in wagons and carts. So the shipments by rail or steamer do not give a complete idea of the great numbers sold and consumed. Georgia cantaloupes, too, get to the northern markets first, and like all other early fruits command the first and highest prices.

We close this section on truck-farming with one more example of the success which attends well-directed management. Mr. F. J. Merriam, who runs a hill-side farm near Atlanta, says that in 1893 he broke ground to meet the market demands in Atlanta. Though he only made \$500.00 the first year, the receipt of \$115.00 from 250 hills of cucumbers convinced him that he was on the right track. The next year his sales went to a little above \$1,900, and from one acre of potatoes he received \$500. The receipts from his land continued to increase and the fourth year his receipts were \$5,068, of which \$764.00 came from lettuce, \$583.00 from turnip salad, and \$404.00 from beets. In 1899, notwithstanding the very bad season in the spring months, he had sold up to the 1st of August \$4,138.55 worth, \$600.00 of which came from one acre planted in cabbage. He estimated that he would, by the close of the year, receive a round \$10,000 from his little farm.

To the careful, intensive farmer, the land yields rich returns. Many farm lands with just as good soil as those that have been cited as examples, yet unimproved, can be bought on very reasonable terms.

HORTICULTURE.

In the product of her orchards, Georgia stands in the front rank. It has long been known that her soil was well adapted to the raising of certain kinds of fruit. But of recent years it has been shown through the labors of the Georgia State Horticultural Society, that Georgia soil has a capacity for the production of a great variety of fruits, especially of apples, apricots, cherries, peaches, pears, plums, prunes, grapes and strawberries. In the extreme southern section of the State we can add to this list oranges, pineapples and bananas.

Peaches.—But the queen of all these fruits in Georgia is the peach, and our State has as great a reputation for peaches as Florida has for oranges. Her acreage in peaches has much more than doubled since 1890, and the capital invested in orchards of this delicious fruit has greatly increased. From counties of the northern to those of the southern section the development has been rapid. There is in all America no peach of superior flavor to that of Georgia.

The land seems specially adapted to their production, and in this climate the crop can be marketed so early that it commands the highest prices. With the great improvement in the transportation service and the fine reputation of the Georgia peach the steady growth of this business is well assured. The country lying south of Macon is the best fruit-growing country in the world. The fruit-grower ships his fruit to the best market at express speed. South Georgia fruit being the first to reach the market has the advantage of the first prices, which are, as before said, the highest. Some of the results of peach-growing in this section seem almost fabulous. A few years ago Messrs. N. Dietzen and brother, near Fort Valley, cleared \$24,000 from a 200-acre orchard, the net profit being \$120.00 to the acre. Mr. Ed. M. McKenzie, of Montezuma, by his first year's shipment, cleared \$2,000 above all expenses from fifty acres of peach-trees. Mr. J. D. Howard, of Lorane, Ga., from a five-acre orchard of three-year-old trees realized \$1,200. Mr. S. M. Mashburn of Barnesville, from thirty acres, sold \$4,000 worth of fruit. This was a net profit of \$133.00 to the acre. Mr. S. H. Rumph, of Marshallville, is probably the largest fruit-grower in the South. He was the first to produce the famous Elberta peach. He has more than 160,000 bearing trees, and one orchard of Abundance plums of 20,000 trees. He

is also largely engaged in the nursery business, from which alone his annual sales run as high as \$70,000. Edgewood Farm, the property of the Hale Georgia Orchard Company, at Fort Valley, covers 1,000 acres of the best fruit and nursery lands of the South, and is situated on a tableland, 600 feet above the level of the sea. There are in the orchard 200,000 trees in full bearing from May to August. Four hundred hands are employed in these orchards. Every extensive peach-grower should own and know how to operate a canning factory, as this would guarantee the saving of his entire crop in any kind of weather. The two canning factories of Eatonton offset in 1900 by canning a great deal of what had been lost to Putnam county through the shipment of fruit which had been so affected by the wet spells in June, that it reached the market in an unsalable condition. During the peach season the canning factories of Fort Valley are kept busy putting up thousands of the best peaches, which are too ripe to bear shipment, and notwithstanding, are in fine condition for immediate use. The steam evaporator for drying the peaches has also been the means of saving much excellent fruit that otherwise could not have been utilized.

In the neighborhood of Eastman a new peach region is rapidly developing. At Tifton, the junction of the Plant System of railways, and the Georgia Southern and Florida Railroad, are large orchards producing the best varieties of peaches. This section is less liable to the effects of late frosts, as is shown by the fact that in 1894 and again in 1899, when peaches in other parts of the State were a total failure by reason of late frosts in the spring, a considerable quantity was shipped from Tifton and other points near by. Cobb county in the northwestern part of the State, on the extreme northern border of the Middle Georgia belt, is among the leading peach-growing counties. The number of peaches shipped from Marietta, the county seat, was much larger during the summer of 1900 than in any previous year, because so many new orchards were beginning to add their product. The largest shipper for the season of 1900, Mr. W. R. Turner, shipped from his large packing house more than 20,000 crates. The principal crop of the county is the luscious Elberta. Mr. W. M. McKenzie, from his own orchard at the foot of Kennesaw Mountain and those of Mr. J. G. Morris and United States Senator Clay, shipped over 12,000 crates of some of the finest fruit, both in size and color, that went from Marietta in the summer of 1900. The orchards of Judge George F. Gober in Cobb and adjoining counties of Cherokee and Pickens, consist of 300,000 trees, most of which were too young to bear in 1900. Of these more than 100,000 are in Cobb county, 75,000 in Cherokee and 125,000 in Pickens.

Mr. G. A. Moore has an orchard of 60,000 trees, most of which are yet young. These details about Cobb county give some idea of how the fruit industry is growing all over Georgia. The vicinity of Rome, close up to the mountain region, and Dalton, among the mountains, is coming into notice for orchards which produce the very best of peaches, and in all the region between Dalton and Dallas new orchards are adding their products to swell Georgia's prosperity. Marietta, Austell, Rome, Summer-ville, Adairsville, McHenry, Plainville, Calhoun and Dalton are coming to the front among the great shipping points for Georgia fruits. The bulk of the crop from this section gets into the northern market after the rush from Middle and Southwest Georgia and before the Delaware crop. The beauty and flavor of the fruit commands the highest prices.

Nor should we forget Cornelia, located upon a ridge of North Georgia hills, 1,600 feet above sea level, and commanding a splendid view of the far-reaching Blue Ridge. This is the trading point for quite an extensive farm neighborhood, and only eighteen miles distant from Nacoochee valley. Here in the mountains some of the most successful orchards of the State are located, which have escaped injury from frosts, even when the peach crops of other sections have been damaged. The great success attending the efforts of peach-growers here has led to the beginning of new orchards.

In addition to the commercial orchards, almost every farm in North and Middle Georgia, large or small, has its orchards of peach, apple, pear, plum and cherry trees, its patches of watermelons and cantaloupes, its strawberry beds, dewberries and blackberries in abundance; and some of them have also their raspberry bushes.

Mr. J. H. Hale of Connecticut, who was in charge of the Horticultural Department of the eleventh census, in a speech at Minneapolis at a meeting of the American Association of Nurserymen, said, concerning the great peach section of Georgia: "It is a magnificent soil, easy to work, and the peach-trees going down into that red clay, it does produce fine colored peaches, and they look better and taste better than those of California."

The Boston *Herald* in an editorial pronounced the Georgia peach superior to that of California and to all others. The Chicago *Record* said: "The fanciest peach that comes to Chicago is the Georgia Elberta, . . . richer than a bowl of fresh cream."

The New York Tribune said: "They are larger than the peaches produced for this market on the Delaware peninsula and in New Jersey, and by universal consent much more delicious than the northern fruit." In

an editorial on "A Nation's Debt to Georgia," the *New York World* said: "The more northern States of this country have long had a deep sense of their obligation to the State of Georgia for its devotion to the cultivation of the watermelon. This debt is now increased by the success of the Georgia peach crop, which has this year been sufficient to drive out of the Eastern market the beautiful but tasteless peach of California."

The following is an extract from an article which appeared in the *Chicago Tribune* of Thursday, March 7, 1901, regarding the peach crop of the country: "While the bulk of the Georgia yield goes to New York and other eastern markets, Chicago is favored annually with a steadily increasing percentage, and fruit men agree in pronouncing the Georgia peach as by all means the best in point of size, flavor and firmness that comes to this market."

During the season of 1900 the number of car-loads of peaches from all Georgia shipping points was 2,500, of which 1,400 were from stations along the Central Railway, along the various lines of which road about 2,100,000 trees were at that time in bearing.

According to figures furnished by Professor W. M. Scott, the State entomologist, there are this year (1901) 5,253,000 bearing peach-trees located as follows:

On the Central of Georgia, including the former Chattanooga,	
Rome and Southern	3,473,000
On the Plant System	300,000
On the Georgia Southern and Florida	200,000
On the Macon, Dublin and Savannah	200,000
On the Georgia Road	150,000
On the Seaboard Air Line	150,000
On the lines of the Southern Railway	1,250,000
On the Western and Atlantic	200,000
On the Atlanta, Knoxville and Northern	180,000
On the Chattanooga Southern	100,000
On the Wrightsville and Tennille	50,000

If the bearing trees away from the railroads be counted the number in Georgia will reach 6,000,000. At a moderate estimate there will be sold from these trees 4,000,000 crates of peaches at a dollar a crate.

Last fall (1900), 2,000,000 new trees were set out, which, with those put out in 1899, will give Georgia over 8,500,000 bearing trees in 1903.

Thus it is seen that the peach industry in Georgia is rapidly growing in importance.

Apples.—The next largest fruit crop of Georgia is that of apples.

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Apples.—The great crop of Georgia is that of apples.

These have been grown successfully in all sections of Georgia. Those raised in the northern part of the State are particularly fine. Large shipments are made from Rome, Marietta, Cartersville and Dalton. This section for early apples has the markets of the North and West. For later apples it has the holiday and winter trade in all the cities of the South, especially in the gulf region, where the best varieties cannot be successfully grown. The charming city of Rome, so romantically situated on picturesque hills sloping to the water's edge, at the point where the Etowah and Oostanaula join their streams to form the beautiful Coosa, is the chief market for the receipt and shipment of apples for a large fruit-growing section. We have no apple that will grow in South Georgia of such size and flavor as to come in competition with the apples of the North, but may we not develop one? If, when Europe had no beet that would make sugar in paying quantities, scientific agriculture could develop one, may not our horticulturists do the same for the Georgia apple?

Judge Gober, who owns so many fine peach orchards in Northwest Georgia, has also 3,000 apple trees, bearing fruit of excellent flavor, and there are many thousands of apple trees all through North and Middle Georgia.

Pears.—This fruit, too, receives considerable attention from the orchard men of Georgia. Thirty-five varieties are mentioned with approval by the Georgia State Horticultural Society. In Houston, the banner peach county of Georgia, over 10,000 pear-trees are owned by Ohio companies. There are also numbers of small orchards of from 1,000 to 5,000 trees. These net their owners anywhere from \$500.00 to \$10,000 dollars a year. There is said to be a strip of land near Marshallville where the fruit crop never fails. Near this town there is a mile of pear-trees flanking the cotton fields. Here can be seen fruit and cotton ripening side by side. One of the most noted points near Fort Valley is the Pear Drive with its double row of trees lining the road, a favorite resort for Houston's belles and beaux.

Plums.—There are also in Georgia many varieties of plums. Many grow wild, but considerable attention is given now to the culture of the better kinds. In the two great peach counties of Houston and Macon, the number of plum-trees exceeds that of pear-trees by several thousand. Near Marshallville is a magnificent orchard, partly of pears and partly of plums.

One of the prettiest views of the fruit lands of Georgia is the plum orchard of James Beaty of Spalding county. The whole country around Griffin is full of peaches, plums and grapes. On the line of the Central

Railroad are 200,000 plum trees bearing finer plums than those of California.

Grapes.—Georgia is rapidly coming to the front as a grape-growing State. The average in vineyards has greatly increased of late years, and their output has attracted the attention of the whole country. The eleventh census reported that Georgia produced 107,666 gallons of wine and 3,876,000 pounds of table grapes. "The latter ripen early," said the census report, "reaching the northern markets a month earlier than those grown in Ohio or New York, and consequently bring much higher prices than the northern and western grapes." The report added that the Niagara variety, a white grape, was hardy and ripened early, and for these reasons was meeting with great success in the Southern States, but that the acme of perfection was the Delaware. Grape culture is not confined to any one section of Georgia. At Cornelia, in Habersham county, a number of Swiss families settled a few years ago, planted vineyards and are now turning out wines of the finest quality and in great quantity. In the vicinity of Tallapoosa, in Haralson county, is a large grape and wine district, where hundreds of acres of vine-covered trellis stretch before the eye. In Floyd county, Northwestern Georgia, much attention is also paid to grapes. In Middle Georgia the yield of this fruit is very great. Near Tennille, in Washington county, there is a large vineyard flanked by an orchard of LeConte pears. One can easily surmise whence Vineyard in Spalding county gets its name. All along the lines of the railway between Atlanta and Macon a traveler sees stretches of vines laden in their proper season with luscious fruit. At Visscher's vineyard, a sunny, fertile spot in Houston county, not far from Fort Valley, all the well-know varieties are found. Large quantities of grapes are shipped each year from the prolific vineyards of this neighborhood. The raising, boxing and shipment of grapes through the various belts of Georgia promise to be as remunerative in the near future as is peach-growing now. About thirty miles from Atlanta, in Coweta county, at Vina Vista, is a large vineyard and winery. Here grapes of every variety and domestic wines of the best quality are produced. To give some idea of what has been done in Georgia we give a few statistics of crops and sales of the fruit of the vine.

J. F. Wilson of Poulan, Georgia, made from 23,415 pounds of grapes 1,361 gallons of wine, which he sold for \$1.50 a gallon, or \$1,941.50 for his wine. He also marketed 12,593 pounds of grapes. This makes a total of 36,008 pounds raised on eight acres of land, or 2½ tons to the acre in the first bearing year. Mr. O. A. Dunson of LaGrange, Georgia, from a vineyard of about 25 acres of four-year-old vines, 600 to the

acre, gathered 30 pounds of grapes to the vine, or 18,000 pounds to the acre, equal to nine tons. The usual estimate is three tons to the acre.

Mr. J. C. Gerioux, of Tallapoosa, has a Worden vine which, in its fourth year, yielded by actual count 232 bunches, with an aggregate weight of 75 pounds. In 1895 he sold his grapes at seven cents a pound, and has never sold them for less than five cents a pound. Mr. George M. Williams, of the same town, planted one acre which had formerly been a baseball ground, setting out one-year-old roots. Two years later his 700 bearing vines bore 8,500 pounds of fruit, which, if sold as low as two cents a pound, would bring \$170.00 as the money product of that one acre. Nor should we forget Judge Gober, a noted fruit king of Northwest Georgia, who owns 15,000 grape vines of sixty varieties.

Other Fruits.—Many other fruits thrive well and make abundant yields. Excellent cherries are produced in Northern and Middle Georgia. Figs and pomegranates grow admirably in Middle and Southern Georgia, needing no protection in winter, except in the upper part of the middle belt. The olive succeeds well on the coast. In the southeast Ogeechee limes are gathered in considerable numbers for preserving. Quinces are raised for the same purpose in Middle and Northern Georgia. Oranges, pine-apples, lemons and bananas are successfully grown in the southern and coast tiers of counties.

A *pecan grove* of 1,000 trees now in bearing, is located in Dougherty county. Several small groves are located in Mitchell county in addition to which 100 acres were planted last year in that county. The Tifton section is well suited to pecan culture, and already several small groves are in bearing. Nor is this industry confined to South Georgia; bearing groves are located in Spalding and Hancock counties, and young trees are in great demand for planting in North Georgia as well as further south. Richmond county also has a few pecan-trees, which bear nuts of fine quality.

Berries.—Georgia raises abundant crops of strawberries, for home consumption and the northern markets. They reach New York and Boston in the interval between the berries of Florida and those of the Middle and New England States. Blackberries are abundant, both wild and cultivated. Raspberries with proper attention make good yields.

Georgia has many advantages over California. It requires only two or three days to transport fruit from this State to New York at a cost of about \$208.00 a car, while it takes nine days from California at a cost of \$360.00 a car. Besides, Georgia fruit being so much nearer to the eastern markets, can be picked at a much more advanced stage of maturity than the fruit of California.

AN ORDINARY SIGHT IN A GEORGIA VINEYARD.



The eleventh census of the United States showed that no farmer could make as much in any other agricultural pursuit as in truck raising and fruit-growing, the average profit from which was \$150.00 to the acre. In making out this average the South stood the highest, which fact was due not only to its great productiveness, but also to its cheap labor, and the higher prices which result from the early seasons. Common laborers can be hired at sixty to seventy-five cents a day of twelve working hours, while a better class of laborers command from eighty cents to one dollar a day. The laborers provide their own board and lodging.

CHAPTER VIII.

DAIRYING AND CREAMERIES.

Among the new industries that are claiming more and more the attention of our people is that of dairying. Within the last decade encouraging progress has been made and quite a number of dairy farms and creameries have been established. Much interest in the subject has been aroused by the Georgia Dairymen's Association, which, in its report at the sixth annual meeting, showed a membership of more than one hundred and seventy. Of course no one will embark in any industry unless convinced that it will pay. It can be easily demonstrated that Georgia is in every respect well adapted to this business. First, climate is all that can be desired. Even during the hottest summer months, July and August, the thermometer rarely goes above ninety degrees, though it does sometimes go as high as ninety-five degrees, and at long intervals, say once in five or six years, may reach one hundred degrees. In winter it rarely falls as low as fifteen degrees above zero, although it has occasionally fallen as low as eight degrees above, and once in about fifteen or twenty years has been known to go to zero. Snow is of very rare occurrence, Middle and Southern Georgia being sometimes for several years in succession entirely free of it. The dairyman is not compelled to incur the expense of housing his cattle for months; for he needs only such simple shelter as will afford them protection for a few weeks. This is itself a very important consideration, as dairymen of the North and West well know.

In the section on grasses and forage crops we have already shown the capacity of Georgia soil to produce the most nutritious forage and pasturage at the lowest cost. Not only are the so-called foreign grasses successfully grown on Georgia soil, but the State is rich in its possession of the hardy Bermuda, equal to the Timothy of the northwest. Even the poorest soil is easily set with Bermuda, while an improved soil will produce it so abundantly that it can be mown two or three times during a season. By sowing on the Bermuda sod in October several winter and spring-growing plants, such as red, burr or crimson clover, hairy and common vetch, either alone, or with each other, or with oats and rye, one may secure good winter and spring pasturage until April.

The cow-pea, besides being a great soil-restorer, is also the best hay and ensilage crop of Georgia. In ninety days from sowing on wheat, or other small grain stubble, it will make a full crop of vines. It will grow on any sort of soil, although of course the better soils make the better yield. Wheat sown November 1st can be harvested by June 1st. Any time from then until July 1st will do to sow the cow-pea, which is harvested in September. It will make more hay in ninety days, if sown after wheat or oats, than red clover will in a year. It is the salvation of our lands and the delight of the milch-cow. Others of our native grasses are rescue or arctice grass, crab-grass and crow-foot grass, which afford pastures new and ample, and with the addition of the various clovers, barley, rye, oats, sorghum-cane and corn forage give a great variety of food for cattle. Our cotton seed, after the oil has been pressed out, furnish the cakes, considered among the best of foods for cattle, as well as the cheapest. A good milch-cow can be fed at a cost of seven cents a day on cotton seed-meal cakes, cotton seed-hulls and a little wheat bran. Corn ensilage, whose succulence and beneficial effects make it doubly valuable, is claimed by some to be the cheapest of all foods for cattle. All the food necessary for stock can be grown right here cheaper than at the North. There is the greatest abundance of pure water supplied by clear running streams. In healthfulness no land is more desirable. Our markets are numerous and excellent. Atlanta, Augusta, Macon, Columbus, Savannah and Brunswick, our large cities, as well as a great number of large and flourishing towns, all thriving and steadily growing in population and wealth, are heavy importers of butter and cheese, most of which they obtain from the States of the North and West and even from Canada. Gladly would they use the product of our own farms.

The sweetmilk, buttermilk, cream and butter from the dairy farms find a ready sale in all the cities and towns of Georgia. The butter, which by most people, is preferred to the best imported article, falls far short of supplying the demand. Good creameries, well located, are a great help to the dairy farms. Creameries in Georgia pay about one half more for milk than is paid in the North, and the home market for butter and buttermilk insures them a good profit. At our creameries whole milk is worth \$1.25 a hundredweight, and butter-fat brings twenty cents a pound, which is equivalent to fourteen cents a gallon for milk, a much better price than can be obtained North and West. A fully up-to-date creamery is located at Griffin, between Macon and Atlanta. There is also one at LaGrange, in Troup county, and another at Sparta in Hancock county.

Another is to be located between Macon and Savannah. Thus dairy-

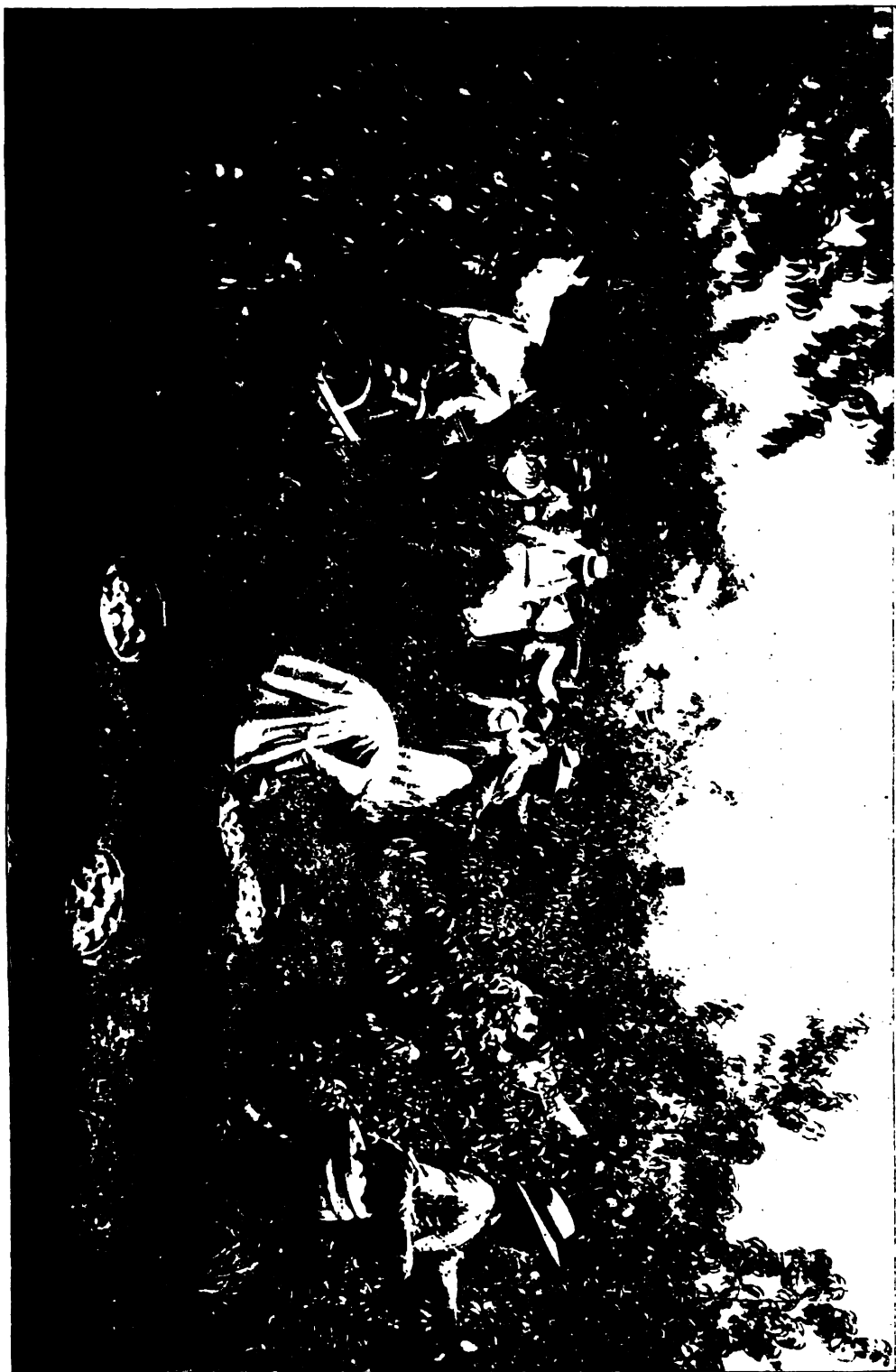
men in a large section of country will enjoy creamery advantages, and this will add much to the profits of their farms. The adaptation of the ice machine to creamery purposes has given to dairying in Georgia advantages unsurpassed in any section of the Union. Creamery men know the disadvantages attending this industry in new territory in the North. Here the difficulties are lessened in many respects. A good market for buttermilk, butter, etc., enables a creamery to start with a small supply of milk. The profit to the dairymen soon builds up a sentiment favorable to the creamery.

Lumber for siloes, barns or other outbuildings will cost from \$7.00 to \$9.00 a thousand, and dressed lumber from \$10.00 to \$14.00. Land can be bought in Middle Georgia at from \$4.00 to \$15.00 to the acre, and can be had on reasonable terms as to time. The rate of interest is 8%. Land fully stocked can be rented on about the same terms as at the North. Most of the lands that are for sale are under cultivation and have more or less of the necessary buildings upon them.

The creamery industry, like that of the dairy farm, has now passed the experimental stage in Georgia. The satisfactory results and handsome profits realized by those who have experimented on these lines, prove the correctness of the opinion of Prof. H. J. Wing, of the Georgia Experiment Station, that in comparing Georgia with many other sections for the production of milk, butter and cheese, the "Empire State of the South has nothing to fear."

Mr. R. J. Redding, director of the Georgia Experiment Station, says: "I know of no soils that respond so promptly and gracefully to fertilizers and manure as the soils of Georgia. During each of the last three years yields of twenty-five to forty bushels of wheat to the acre have not been unusual. The same soils would produce '75 to 100 bushels of oats, or 1½ bales of cotton, or 50 bushels of corn. . . . The common crab-grass, the inveterate foe of the old-time Georgia cotton farmer, would be considered a very great boon in any northern State, if it would spring up in the corn fields and small grain fields after harvesting and produce 1 to 1½ tons of good hay (much better than Timothy), as it will do in any good soil in Georgia, without any expense except the harvesting. . . . Cottonseed-meal and hulls afford an unfailing resource for feeding and fattening, being especially and admirably adapted to beef-cattle.

Mr John Wallace of Griffin, Georgia, to whose "Conclusions of a Northern Creameryman" we are indebted for some excellent points, declares: "I have been extensively engaged in dairying in the North, especially in Northwest Iowa, where I operated several creameries and



PEACH PICKERS.

cheese factories, and have now been operating a creamery in Georgia for the last six months, and am highly gratified with results. . . . Cheap lands, climatic conditions, variety of grasses, etc., offer inducements to young dairymen that can be found nowhere in the northwest."

Of course, after the questions of climate, soil, healthfulness, and food for man and beast have been considered, the selection of the proper breed of cattle for the dairy farm is of the highest importance. The question is what kind of cattle will pay best, and how much attention should be bestowed upon them. If milk is the object of the proprietor, special attention should be given to providing suitable and abundant food, and proper care should be bestowed upon the cattle themselves. Of course, each individual must make his own choice of breed to suit his soil, climate and pasturage. At present in Georgia the Jerseys are the most popular and fashionable. Mrs. B. W. Hunt of Eatonton, the wife of one of the most successful farmers of Putnam county, in an article on "Bermuda grass and the Jersey Cow," gives a decided preference to this particular breed, which she considers the queen of the milch-cows. Though the scepter of the Jersey is disputed by the Guernsey and the Holstein, she is undoubtedly the preference among the dairy farmers of Georgia.

Skim-milk is a valuable by-product of the dairy, and many experiments have been made in feeding it to pigs and calves at the dairy. These experiments have shown that skim-milk in combination with grain makes an excellent food for hogs at all periods of their growth, but especially during the earlier periods. Not only does this combination make a much more economic ration for hogs than either milk alone or grain alone, but also causes the animals so fed to make much more rapid gains in flesh.

When the proportion of these two articles of diet is three pounds or somewhat less of skim-milk to one of grain, the return for the skim-milk is greater than when a larger proportion of it is used.

When hogs are fed on milk alone they gain very slowly and do not keep in good health, and young pigs fed on grain alone do not thrive as those to whom milk and grain are fed in proper proportion.

If fed on either of these materials alone they do better pastured than when kept in small pens.

Young calves up to 3½ months of age require less of both milk and dry matter to make a pound of gain than do hogs. When they have reached five or six months, they require more dry matter, half of which at least should be hay.

Considering only the gain in live weight and quality of meat, whole

milk is the best food for calves, but is too expensive a ration, and they may be very profitably fed on skim-milk when properly used.

Calves whose rations are composed largely of skim milk gain one half of a pound less in a day than those fed on whole milk, but require practically the same amount of dry matter for every pound of gain.

When fed to calves, fully as large financial returns are obtained for the skim-milk as when fed to hogs.

At creameries or cheese factories, it pays to feed their by-products near these establishments. The proceeds from them can be divided among the patrons according to the milk supplied by each, in the same way as the butter and cheese made are divided. Under the very best conditions it costs five hours of labor, or fifty cents, to look after 500 hogs for one day. This is \$50.00 for caring for 500 hogs for 100 days, or ten cents for one hog for a hundred days, or for a gain of 100 pounds, which gives one-tenth of a cent as the labor cost of producing one pound of live weight of hog. If the value of the gain was reckoned at four cents a pound, the labor cost of producing the pork was only $2\frac{1}{4}$ per cent. of its selling price. It is evident that when hogs are handled in large numbers, as they may be at a creamery, the labor of growing them is a very small item. These remarks on the labor-cost of feeding animals are just as applicable to the feeding of calves as of hogs, though it would be more difficult to feed a large number of the former than of the latter. On the farm the expense of feeding these animals would be greater than at the creamery. The value of whey for feeding is generally estimated at one half that of skim-milk.



ICING CARS.

CHAPTER IX.

STOCK-RAISING.

So soon as our farmers began to diversify their agricultural industries and no longer to give their whole attention to the raising of cotton, a demand was created for improvement in the breeds of cattle, and more care than ever before was given to the raising of stock. Of course, even under the old system every enterprising farmer was careful to secure a full supply of good live stock for his plantation, and it was no unusual thing to see pastures on which were grazing fine-looking cattle, or flocks of sheep. Glossy-coated, well-groomed horses, champed in the stalls the ripened grain or fed upon the nourishing grasses of the meadows. The well-ordered plantation of the olden time was well-stocked also with fine mules and well-fed hogs, and abundantly supplied with poultry of every kind. But there were many farmers who did well with corn and cotton, whose stock was of such inferior sort, as to convey an idea of thriftlessness and lack of enterprise. Of late years, with the great improvement in methods of cultivation, have come advanced ideas on the breeding, rearing and care of all kinds of stock needed on the farm.

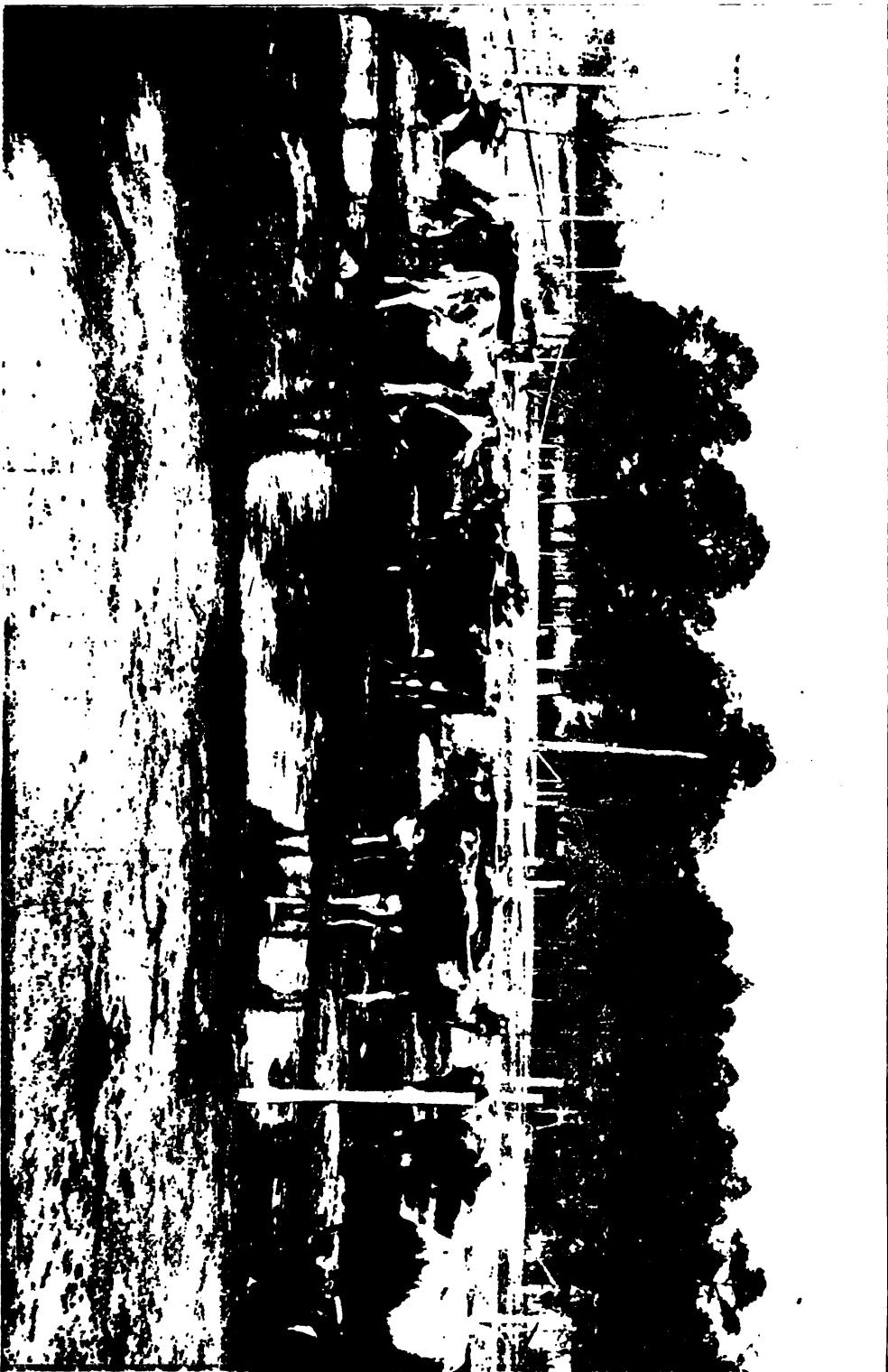
CATTLE.

Cattle.—The industries of dairying and creameries comparatively new in Georgia, have had much to do with the preference shown in this State for the Jersey. Indeed the high favor in which they are held is not confined to Georgia. Mr. Henry E. Alvord, chief of Dairy Division of the Bureau of Animal Industry, United States Department of Agriculture, says: "Jerseys have been so numerous imported, have increased so rapidly in America, have been so largely used for grading, and have proved so remarkably well adapted to a wide range of climate, that the characteristic markings of no other breed can be so frequently seen wherever dairy cows are kept, from the Saint Lawrence to the Gulf, and from ocean to ocean." They derive their name from the island in the English channel, known as Jersey, supposed to be a corruption of Cæsarea, as the Romans called it. Though there were importations of this breed, at that time known as Alderneys, to the United States prior to 1840, these im-

portations did not become active until about 1860. Since that time 2,000 animals or more have been imported from the little home island year after year, nearly all of them coming to this country. Jerseys are the smallest in size of the noted dairy breeds, cows ranging from 700 to 1,000 pounds and the bulls from 1,200 to 1,800 pounds. But their average weight in America is considerably above that attained in their native island. Where effort has been made to build up a herd of larger size, mature cows have easily attained an average of over 1,000 pounds. For a time many persons imagined that a pure Jersey had to be of a solid color. This was an error; for all the earliest importations were broken in color. For a long time they were bred almost exclusively for butter. In this country breeders have successfully striven to increase the milk yield, while still maintaining its high quality. A Jersey cow is essentially a machine for producing butter-making milk, and may be considered as worthless when she ceases to give milk. Sometimes a Jersey steer or an occasional non-breeding female has been found to take on flesh and make small beasts for the butcher. They then have a fine-grained, high-flavored flesh, very rich in color.

Guernseys can be better compared with Jerseys than with any other cattle. They are a size larger, stronger-boned, and a little coarser in appearance. They are claimed by some to be hardier and larger milkers, but both these points are strongly disputed. They are called after their native home, the second in size of the channel islands and in common with the Jerseys were long called Alderneys, both in America and England, without regard to the island from which they came. They are light in color, yellow and orange predominating, with considerable white, usually in large patches on the body and legs. On some cows darker shades, approaching brown, occur, and these colors are quite common on bulls of this breed. The cows, when properly handled, are very gentle, and the aged bulls are more easily managed than Jerseys of like age. The Guernsey cows give milk in large quantities, and of uncommon richness in butter-fat and in natural color. Wherever quality secures a good price their milk ranks high in market. They are noted for the richness of their milk, combined with special economy in feeding. The grades, offspring of a Guernsey bull and well-selected cows of no particular breeding, usually make very satisfactory dairy stock.

On their native island their beef is highly prized and young animals are said to fatten easily at a profit. The friends of the Guernsey in this country lay no claims to its being a beef producer; yet when an animal of this breed, if not too old, ceases to be profitable for the dairy, it can be converted into beef without loss to the feeder.



JERSEY FARM.

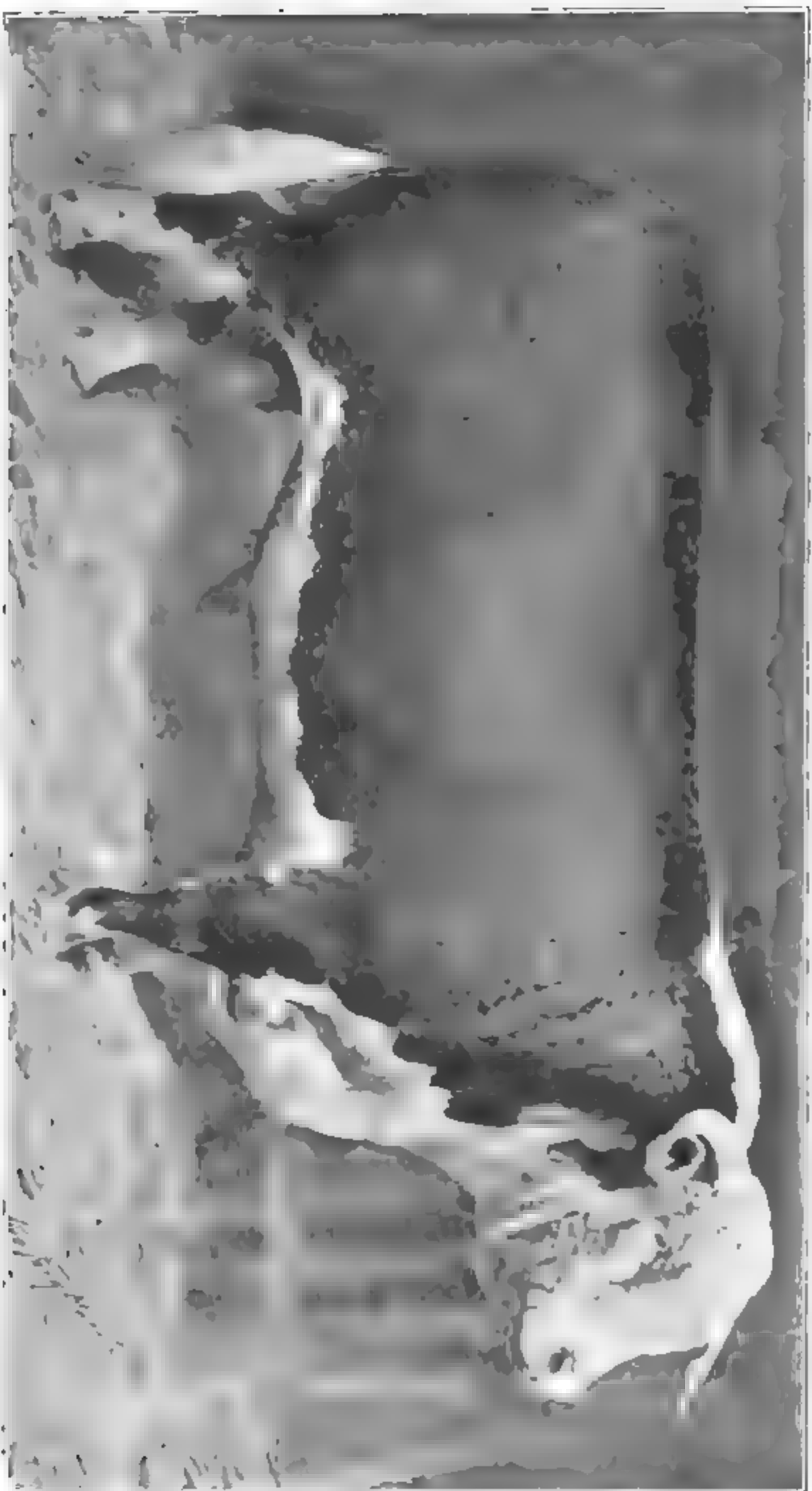
The Holstein-Friesians, whose native home was North Holland and Friesland, constitute one of the most notable of the dairy breeds. Both in England and America these cattle have been known by several different names, viz.: "Holland cattle," "North Hollanders," "Dutch cattle," "Holsteins," "Dutch Friesians," "Netherland Cattle" and "Holstein-Friesians." After sharp contention in this country the last name was generally accepted; but, says Mr. Alvord, "It seems unfortunate that the simpler and sufficiently descriptive and accurate name of "Dutch Cattle" was not adopted. For it was in Holland, a land noted for a thousand years for dairy products, that this celebrated breed of large bi-colored cattle has slowly but surely developed its present dairy excellence. They are distinguished by "their large frame, strong bone, abundance of flesh, silken coat, extreme docility and enormous milk yield." The original Dutch settlers of New York doubtless brought over with them their favorite cattle (during the 17th century), and there are definite records of not more than three or four importations previous to 1850. But in 1857 began the importations which have steadily increased in frequency and numbers until they are now to be found in all parts of the Union. The striking features of this breed are the color markings of black and white and the large size of the animals of both sexes. They are the largest of all the dairy breeds. Their large frames are usually well-filled out, with the chest, abdomen and pelvic region fully developed. Care must be taken to prevent the males from becoming too heavy for breeding animals, and the females, when not in milk, take on flesh quite rapidly. They are large feeders, and must have abundance of rich food without the necessity of much exertion to get it. The cows range in weight from 1,000 to 1,500 pounds, with a general average of about 1,250 pounds. The bulls, when fully matured, often weigh above 2,500 pounds. The cows are famous as enormous milk-producers. There are abundant records of cows giving an average above their own live weight in milk monthly for ten or twelve consecutive months. There are numerous well-authenticated instances of daily yields of 100 pounds or more for several days in succession, and 20,000 to 30,000 pounds of milk in one year. Cows giving from 40 to 60 pounds (or from 5 to 7 gallons) of milk in a day are average animals, and from 7,500 to 8,000 pounds a year can be depended on as a herd average. The milk of these large producers is generally pretty thin, low in percentage of total solids and deficient in fat. The cows are a favorite with dairymen doing a milk supply business, but their product has in numerous cases been below the standard fixed by State and municipal laws. Some families of Holsteins and some single cows are, however, celebrated for rich milk and fine butter. In

temperament these animals are quiet and docile, bulls as well as cows, the bulls being exceptionally so.

The cattle which have been most famous both in England and America, which have received the longest attention of breeders and improvers, and which have made the most general impression upon the live stock of both countries during the nineteenth century are the Shorthorns or Durhams. They are said to be descended from an old Northeast of England breed, formed by crossing the aboriginal British cows with large frame bulls imported from the continent. Immediately after the American Revolution attention began to be given to the improvement of cattle in America, Virginia taking the lead. During the last hundred years the Shorthorn blood has been more generally distributed through the United States than that of any other cattle. It has been the most acceptable basis for the improvement of the native stock, both for beef and dairy purposes.

The Shorthorns are a beef-breed and have been so for generations. Yet there have always been good dairy cows among them, and some families among them have been kept distinct and are known as "milking Shorthorns." They are probably the largest among pure-breed cattle. Bulls ordinarily weigh a ton or more, some running up to 3,000 pounds. Fully matured cows range from 1,200 to 1,600 pounds, sometimes a little below, sometimes a little in excess of these limits. The colors of this breed have always been red and white, with various blendings of these two. The red is especially fancied in this country. The Shorthorns are generally quiet and gentle. Although they are to be generally classed as beef-cattle, yet there are records of cows giving 6, 8 and 9 gallons of milk a day, with no other food than grass.

Ayrshire cattle are among the youngest of well-established breeds. Coming originally from the country of Ayrshire in the Southwest of Scotland, a region of moderate fertility, where natural pasturage is so sparse that grazing animals must travel long distances in a day to satisfy their hunger, the small, unshapely foundation race has been built up within the nineteenth century by the liberal use of blood from the cattle of England, Holland and the Channel Islands, until they bear little resemblance to the cattle of Ayrshire described in 1825. The breed of the present day bears strong resemblance to the Jersey in certain features. In form, color and horn it is very similar to the wild white cattle of Chillingham Park. With the exception of the little Irish Kerry, there is no cow which excels the Ayrshire in thriving on scanty pasturage and giving a dairy profit upon the coarsest of forage. Yet she responds promptly and profitably to liberal feeding. The Ayrshires are of medium size among



PEREGRINE FALCON

dairy cattle. The cows weigh from 900 to 1,100 pounds, averaging probably 1,000 pounds in a well-cared-for herd. The bulls weigh from 1,400 to 1,800 pounds at maturity, sometimes more. This breed is short-legged, fine-boned, and very active. The prevailing color of the body is red and white in varied proportions; in spots, not mixed. The Ayrshire cow yields a large supply of milk. Five thousand five hundred pounds a year as an average for a cow, well cared for, is counted on and often realized. The milk is not exceptionally rich, but somewhat above the average. It is very uniform in character, the fat globules being small, even in size, and not free to separate from the milk. The Ayrshire is not, therefore, a good butter cow, but its milk is admirably suited for town and city supply, being well above legal standards, capable of being carried considerable distances and roughly handled without injury. Some of the cows have been known to produce 8,578 pounds (about 1,000 gallons), in a year.

A good beef breed is the Durham. Some of the cows are good milkers, but the breed is not sufficiently numerous and has not as yet been handled much for dairy purposes. American breeders have succeeded in separating from the general Shorthorn stock a family having all the features of that race, but with no horns at all. These are called Polled Durhams and are now allowed a name and place as a distinct breed.

The Brown Swiss, as the name indicates, had its origin in Switzerland. Among dairy breeds this may be placed in the second class as to size. They are fleshy and well proportioned, with straight, broad back, heavy legs and neck, giving a general appearance of coarseness. But when examined closely they are found to be small-boned with a fine silky coat and possessing many attractive dairy points. They are generally described as brown in color, which runs, however, through various shades, often into a mouse color and sometimes a brownish dun. Bulls and cows are alike docile and easily managed. They weigh from 1,200 to 1,400 pounds on the average, bulls sometimes running up to 1,800 pounds, although they are not so much heavier than the females as in most other breeds. The cows, when developed as a dairy breed, give an average of ten quarts of milk every day in the year.

These cattle, being almost always fat and easily kept so, are good for beef as well as for milk. The flesh is said to be fine-grained, tender and sweet. This breed is not well-known in Georgia. In their native country their ordinary food is nothing but hay, grass, or other green forage throughout the year, but they respond promptly to more generous feeding.

The Devons, so called from the elevated region in the north of Devon-

shire, England, were among the very first cattle brought across the Atlantic, reaching New England on the ship *Charity* in the year 1623. But the first herd to be brought to this country and kept pure, so that breeders can still trace it, was sent directly to Mr. Robert Patterson of Maryland, in 1817. There have been many other importations, especially in later years. They are noted for beauty, compactness, intelligence, docility, aptitude to fatten and quality of milk. The horns of the females are particularly elegant, sharp-pointed, black-tipped, and of medium length with a creamy white color and curving upward. In the bull the horns are shorter and straighter. Devons are of medium size. As a rule they do not yield large quantities of milk, though some single animals have given forty or fifty pounds a day. The milk is rich in quality, ranking in that respect next to the Jersey and Guernsey in percentage of butter-fats, total solids and high color. Those who hold this breed in highest esteem regard it as chiefly a beef-producer. Its flesh is fine-grained, usually tender and well marbled, and the fat is of a deep yellow color like milk fat.

The animals of the Dutch Belted breed are all jet-black, with a broad band or belt of pure white encircling the body. The cows seem to give good satisfaction as milkers, although their milk is not above the average in quality. There are comparatively few of this breed in America.

The Red Polled cattle resemble the Devons, as closely as the Polled Durhams resemble the Shorthorns. Yet the two races are probably not closely related, the Devons coming from the southwestern part of England, and the Red Polls having their origin on the eastern plain, north of the river Thames, particularly in the counties of Norfolk and Suffolk. They are hornless cattle, red and other colors. They were among those brought in the early days to the English colonies in America. The so-called "muley" cows among our native cattle are probably their descendants mixed with other strains. The animals of this breed give rather more milk than the Devons, though not so rich in quality. They seem to be better adapted to making meat than producing milk. Their admirers claim that they are good at both and strongly recommend them as the general farm cow. Steers of this breed are special favorites as working cattle.

Other breeds, especially distinguished as beef-producers, are the Hereford and Angus.

If beef breeds are wanted, their superiority is in proportion to their tendency to mature early and to produce beef of high quality. The thoroughbred animals make gains much more rapidly than those of inferior blood, even though the feed be exactly the same in quantity and



HEREFORD COW.

quality. There has been considerable discussion among breeders of beef cattle as to whether the heifer and steer produce equally good beef, or whether that of the former is not preferable. To the latter view the English meat dealers and many of the American are inclined. "A few years ago," says the report of the Kansas State Board of Agriculture, "it was the aim and purpose of both breeder and feeder to produce cattle of great weight and size, nor was the steer considered fit for slaughter or market until he was four or five years old. . . . What a revolution occurred in the early 80's! Every progressive breeder turned his attention at once to the production of perfectly matured cattle at three years as an objective point. The governing law was a triune one—the cattle must possess hardness of constitution, feeding quality and early maturing ability."

The report of the superintendent of the Farmers' Institutes of the Province of Ontario, after describing three well-selected animals of different breeds, an Angus heifer, a high-grade Shorthorn steer, and a high-grade Hereford steer, says: "These animals, though representing different breeds, present that compactness of form, thickness and substance, together with superior finish and quality, coupled with an inherent aptitude to lay on flesh thickly and evenly, that always characterizes the beef animal of outstanding merit." It must be remembered that there is a pronounced dairy type and an equally pronounced beef type. "There are not a few cows of quite positive beef tendencies capable of making very creditable dairy records, and a great many that combine milk and beef to a profitable degree, but a good carcass of beef from a steer of a pronounced dairy type or breed is rarely seen. So clearly and definitely is this beef type established that to depart from it means to sacrifice beef excellence."* Those who are engaged in stock-farming in Georgia will do well to bear it in mind, that for dairy purposes the best breed is the Jersey, while for beef the best types are the Shorthorns, the Hereford and Angus.

Long strides have been made of late years by the dairymen of Georgia toward the supplying of our home markets with butter from their own farms. Though the supply of good home butter is still far short of the demand, yet, as our dairy farms increase, their butter product will more and more supplant the imported article. Georgia, so well supplied, as we have already seen, with abundance of the best grass and forage crops, can also raise its own beef equal to the best, and keep at home the money now paid to the great packing-houses of the North and West. Let intelligent stockmen turn their attention this way with the full as-

*Report of the Superintendent of Farmers' Institute of the Province of Ontario.

insurance that large profits will attend here in Georgia their thrift and enterprise.

Some of our own people engaging in this business of raising beef for the market would make a good profit for themselves and keep money in Georgia that now goes to the West.

The experience of Mr. T. R. Sawtell of Atlanta, will give some idea of the low price at which cattle can be fed. In a letter to ex-Governor W. J. Northen, he said:

"Below you have the result of my experiment with the thirteen months calf that I fed, exclusively on cotton-seed meal and cotton-seed hulls. I bought the calf from Mr. M. A. Butler of Noah, Tenn., December 16, 1899. He was thirteen months old and weighed 899 pounds. I paid $3\frac{1}{2}$ cents per pound, making the cost \$31.15. I took him to my packing-house and fed him until June 16th on cotton-seed hulls and meal. When slaughtered he weighed 1,320 pounds. He was sold at $5\frac{1}{2}$ cents per pound.

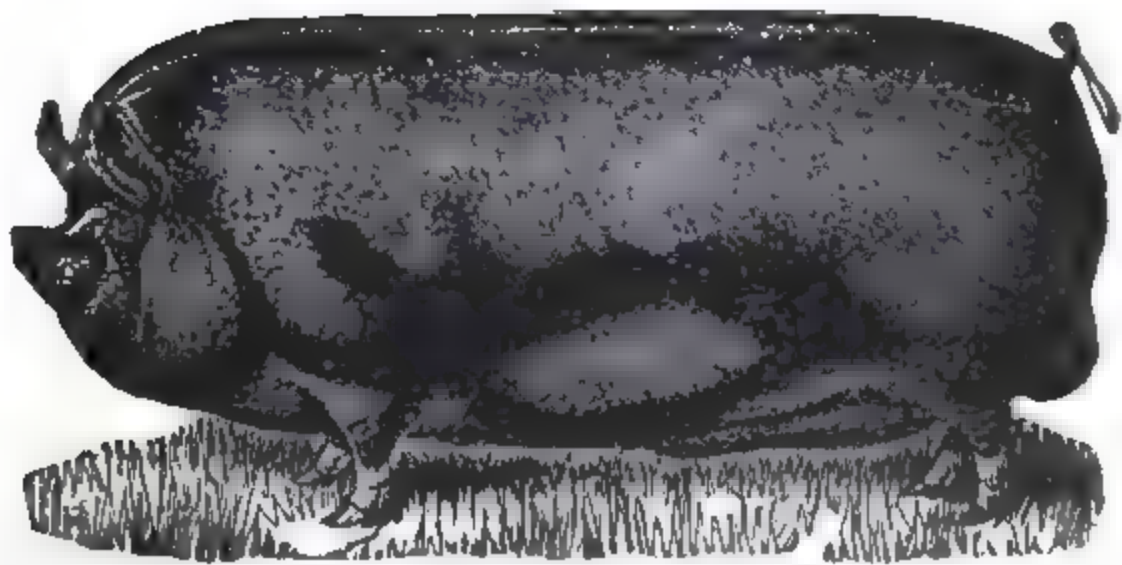
Bought 899 pounds at $3\frac{1}{2}$ cents.....	\$31 15
Fed 180 days at 6 cents	10 80—\$41 95
Sold 1,320 pounds at $5\frac{1}{2}$ cents	72 60
Net	\$30 65

If this can be done by Mr. Sawtell, who makes it a business to supply good beef to the people of Atlanta, would it not pay some of our enterprising citizens to select the best breeds and raise cattle for our markets? If the profit on buying and feeding one calf was \$30.65, that on one hundred calves would be \$3,065.00. If these calves were raised on a stock farm with abundance of pasturage, the cost of their rearing would be less than where all the feed must be paid for at the regular market prices. As has been said before, no State in the Union is richer in pasturage and in grass and forage crops than Georgia. Besides these we have right here on our farms without any freight expense the cotton-seed hulls and meal which make such excellent feed for cattle. If cattle in Norway fed on cotton seed hulls and meal shipped from our country can be sold at a profit in the markets of England, is it not to be supposed that our farmers can raise cattle and sell them at a profit in our own markets?

The most profitable course for the general farmer to pursue in improving the quality of his live stock is to buy first-class thoroughbred males. The calves of a mixed average lot of cows, sired by a thoroughbred bull of any of the best breeds, will partake much of the nature of the sire, and the females of this grade again bred to a thoroughbred will



CALF FATTENED BY T. B. SAWTELL,

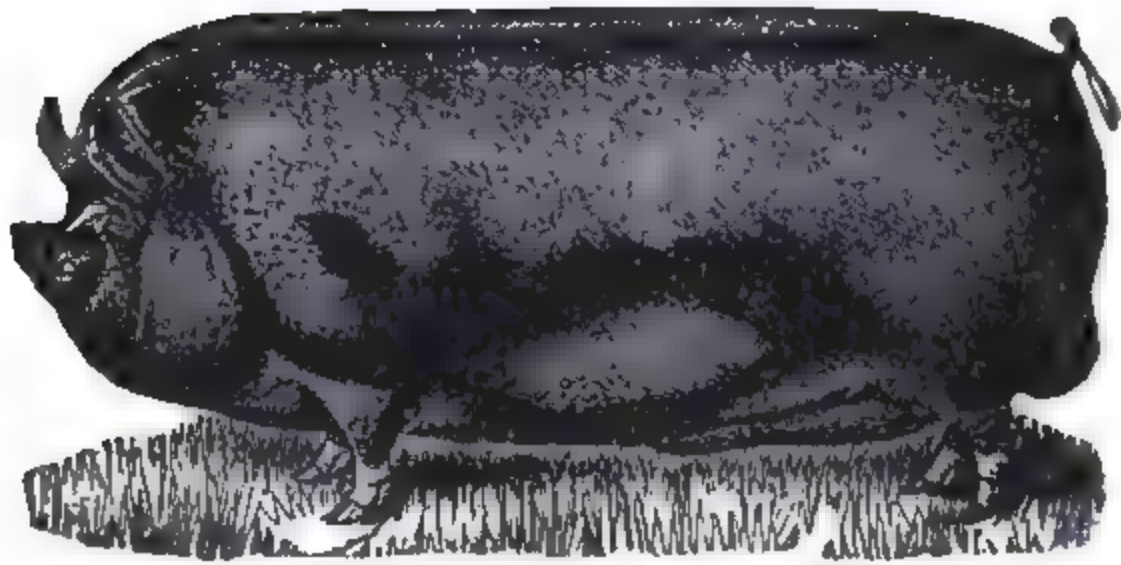


**BERKSHIRE BOAR—COMMANDER'S AMERICA, REGISTER
NO. 53669, RAISED AT BELMONT FARM.**

NOTE.—For description of Belmont Farm, see Sketch of Cobb County.



CALF FATTENED BY T. R. SAWTELL,



**BERKSHIRE BOAR—COMMANDER'S AMERICA, REGISTER
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NOTE.—For description of Belmont Farm, see Sketch of Cobb County.

from hogs of his own raising. Thus making on his own lands all his food supplies, he can use the money obtained from his crop of cotton or the surplus of all the products of his fields for the purchase of those things that add culture, refinement and adornment to the home, besides having something to lay up for his own comfortable maintenance in old age, or to add to the inheritance of the children that shall come after him. Every landowner has thus an opportunity, by economy, thrift and enterprise, to acquire a competence and secure his freedom from the cares that torture him who borrows and through interest and mortgages becomes the bond-slave of the lender. Every farmer can, by intelligent use of his resources, live a prince upon his own estate. But the first step toward this happy condition is the raising of his own supplies, so that he can be independent of the meat and granaries of the West. His beef, his mutton, hogs and poultry demand some part of his attention.

The hog, though originally unknown in America, Australia or the Polynesian group, was everywhere introduced by the early navigators, and has propagated his species so rapidly that he is now abundant in all these lands, both in confinement and in a state of nature. Though thriving best in a warm, genial climate, yet, like man, he becomes accustomed to all climates and countries. Where left to roam wild he degenerates into the razor-backed animal of the mountain or the pine land region. Where properly cared for and developed by careful breeding, he becomes the sleek, fat porker of the well-kept farm.

From the wild boar, once so common in Europe and Asia, the domestic hog, wherever found, has sprung. At what time breeding for the improvement of the wild animal began we do not know, although we are told that the ancient Romans made it a study.

England seems to have taken the lead in this useful art. The swine-raisers of her different provinces endeavored to improve their own breeds by crossing the fine-boned hog of China with the larger breeds of England and other countries. By their selections, crossings, and re-crossings, have arisen the varieties which take their names from the provinces which first produced them, as the Berkshire, Suffolk, Essex, Chester, etc. It is not our purpose to go into a description of these various breeds. Most of the best breeds have been tested by the farmers of this country; and at one fair or another all the improved breeds have taken premiums. The great object is to secure such as are hardy, and will make the greatest supply of pork and lard with the least amount of feeding. If bacon is the object desired, it is well to select the large and heavy variety. If pork is the thing desired, choose the smaller varieties, such as arrive with greatest rapidity at maturity and are likely to produce the most delicate

flesh. The keeper of the hog should be just as careful to see that the sty or yard is kept clean, as to furnish him the food which experienced farmers have found to be best suited to his needs.

Cleanliness and careful attention are very necessary to secure the best results, both as to the healthfulness of the animal and the consequent excellence of his flesh for food. Among the fine breeds the Berkshire is the most generally distributed throughout Georgia. Next in popularity comes a breed which results from a crossing of the hog of Poland with that of China. We have also the red Jersey hog, the white Chester, and other valuable breeds. All of these do well in Georgia. Our farmers are, of course, familiar with the various diseases to which hogs are liable, and also with the remedies. Many of them, especially skin diseases, can, in a great measure be prevented by keeping the pigsty or yard as clean as possible, and by seeing that the hog gets wholesome and suitable food. In the case of an animal that furnishes such a heavy per cent. of the meat supply of our people, too great precautions cannot be taken in guarding him against any of the causes that would tend to make his flesh unwholesome.

By the United States census of 1890 the number of swine in Georgia was 1,396,362. By the Year Book of the Department of Agriculture for 1899 we find the number to be 2,093,987, valued at \$8,095,353. The increase in the number of swine from 1890 to 1899 was 697,625, a gratifying exhibit, in that it shows, that the farmers of Georgia are raising more of their own supplies and depending less on the packing-houses of the West.

Sheep.—In the section on grasses and forage crops the adaptability of Georgia to sheep husbandry was incidentally referred to. In 1875 Hon. Thomas P. Janes, then Commissioner of Agriculture, issued a pamphlet on Sheep Husbandry in Georgia which met with such high favor not only in this State, but also in the whole country, that in 1883 his successor, Hon. J. T. Henderson, republished it, with such additions to the original as were deemed necessary to give more fully a great amount of desirable information on this subject. We deem it well to acknowledge in the outset our indebtedness to the aforesaid publication, for many facts herein recited. According to the United States census of 1860 the number of sheep in Georgia was 512,618. From that time to 1875 there was a steady decrease, the number in the State being less by 193,295 than in 1860. Doubtless some of this loss was due to the ravages of war, some to thieves during the disordered times that immediately followed the close of hostilities, but the greater part to the ravages of dogs. Through the persistent efforts of the friends of sheep industry the legislature was pre-

vailed upon to pass a dog law allowing each county to enact its provisions within its own borders, as it might see fit. The law has been adopted in many counties with very beneficial results, and in those counties the industry of sheep-raising has taken on new life. Many more counties will doubtless adopt it and then Georgia will resume her proper position as a wool-producing State. In this industry, as in everything else, one must be convinced that it will pay before he will put his money into it. The climate of Georgia corresponds with that of some of the best wool-growing regions of the world. The southern part of Spain, a country once famous for its merinos, is warmer than South Georgia. Australia, one of the chief wool countries of the world, has a warmer climate than Georgia. In the cost of keeping sheep warm climates have a decided advantage over cold ones. In Southern, Middle and Northern Georgia sheep have been kept with a profit to the owner far in excess of that derived from cotton, notwithstanding the ravages of dogs. In Southwestern Georgia snow never falls and the ground seldom freezes. The pine forests are carpeted with native grass, affording rich pasturage all the year. According to a statement of Mr. David Ayers of Camilla, Mitchell county, his flock of 3,500 sheep cost him annually 14 cents a head and the average yield a head was three pounds of unwashed wool, at 30 cents a pound. Owing to its freedom from hay-seed and to the fact that our heavy spring rains wash out the yolk and dirt, the unwashed wool of Georgia is as clean as the brook-washed of Pennsylvania. He did not feed his sheep at any time during the year, and used only what is known as the native stock. Of course the cross of the Merino with this stock would have given a greater quantity and better quality of wool. During the same year a Mr. John McDowell of Washington county, Pennsylvania, on land that cost five times as much as that of Mr. Ayers, made only one half of the profit on money invested in the best breeds of sheep. Thus it seems that where sheep-husbandry is made a specialty Georgia has a decided advantage over Pennsylvania.

Mr. Robert Humber, of Putnam county in Middle Georgia, kept 138 sheep of the cross between the Merino and the common stock. He said that they cost nothing except the salt eaten by them and paid 100 per cent. on the investment in mutton, lambs and wool. They ranged on Bermuda grass in summer, and on the fields from which the crops had been gathered, and on the cane bottoms in winter. Their only food was that thus gathered by themselves. They yielded an average of three pounds of wool to the head, which he sold at twenty-five cents a pound.

Mr. Richard Peters, who kept sheep in Gordon county and had an experience of twenty-seven years, and had tested the Spanish and French

Merinos, Southdown, Oxfordshire-Down, Leicester, Asiatic Broad-tail, or Tunisian, Improved Kentucky Cotswold and native sheep, said that a cross of the Spanish Merino and natives had proved most profitable with him. Every other Georgia correspondent agreed with him in this opinion. The progeny of the native ewes and Spanish Merino bucks showed "marked improvement, having constitution, fattening properties, thriftiness and a compact, close fleece." While he raised only 70 lambs to every hundred ewes of the pure Merinos, he raised a lamb for every ewe of the cross-bred natives and Merinos. During mild winters in Gordon county his sheep had to be fed only 30 days; in cold, wet winters, twice that long. In speaking of the value to land of sheep manure Mr. Peters said: "I can only judge of its value by the compact sod of grass on my sheep pasture, capable of sustaining ten head to one as compared to twenty years ago."

The experience of Mr. Peters agreed with that of almost all the other sheep-raisers in Georgia as to the breeds most suitable to this State. The Merinos are better suited to our climate than the long-wooled Leicesters and Cotswolds.

Every sheep-raiser should remember the maxim that increase of lambs is increase of wool. Special attention should be employed to have the lambs come at the best season. The period of gestation is 151 or 152 days. The best time for the coming of the lambs is, for Middle and Lower Georgia, about the first of January; for North Georgia, either in November, or about the last of February and first of March.

During the short period in North Georgia when sheep must be fed cotton seed afford a cheap and excellent food. These, with oats or rye pastures sown in the early fall, will afford sufficient food to induce an abundant flow of milk for the lambs, and at the same time will keep the ewes in a healthy condition, and thus increase the clip of wool for the next season. Quantity and quality of wool will be greatly improved, and the health of the sheep be preserved, by keeping them in a uniformly good condition throughout the year. Do not allow them to grow thin during the winter. That part of the fiber grown during a poor condition of a sheep will be weaker than that grown, when abundance of food is supplied and all proper attention is given to the animal. Weak points in the fiber injure its quality, and of course its sale. For this reason wool grown in warm climates, where there is a continuous supply of green food, is heavier and of better quality than that grown in colder climates, where the sheep necessarily grow thin during severe winters. There is among sheep-raisers a maxim that for sheep "change is more important than range." In the extensive sheepwalks of the northern

sections of Georgia or the wire-grass regions of the southern section, the flock can find the necessary change by extending their walk. But when they are kept within inclosures, in order to insure their health and variety of food, they must occasionally be changed to new pastures.

If they are to be grazed upon 100 acres, it is a good plan to divide this land into two fields of 50 acres each, and let the flock alternate monthly between them. They ought to have fresh shading ground during the day and fresh beds at night. Where the sheepwalk is always the same, certain pungent plants necessary for the health of the animal become exhausted. During the summer sheep feed early in the morning and late in the evening, spending the middle of the day in the shade. Since they seek the same sheltering places from day to day, these resorts become foul and hurtful to the health of the flock. If a change of pasturage is not practicable, these places should be occasionally cleaned off, and the manure from them should be saved.

All changes from pasture to pasture, or from pen to pen, should be made in the cool of the evening or early morning (the latter being the better), so as to avoid disturbing the flock in the heat of the day.

Salt should be constantly accessible to the sheep and in sufficient quantities to prevent scuffling and fighting over it. Or a good plan is to salt them regularly twice a week, placing the salt in troughs or on clean rocks. It is best to give the salt in the evening, because in this way too free use of water after salt, which is not good for the sheep, will be avoided. It will be found very conducive to health to dig troughs in ordinary pine poles and fill them with common tar sprinkled with salt. These being arranged at a convenient point in the sheepwalk will furnish salt and at the same time induce a moderate consumption of tar, which acts as a disinfectant and promotes health by checking the fly which sometimes in the summer months deposits its eggs on the nostrils of the sheep, thus producing worms in the head.

The sheep is exceedingly neat and even fastidious about its food. Hence it should have clean grass and clear, running water. Though they do not use as much water as other animals and sometimes go days without it, their comfort and health require that it should be accessible.

In spring and summer the flock should be closely watched for maggots in the wool, whose presence will be indicated by a dingy, bluish appearance. Spirits of turpentine should be promptly used on the infected parts; for if the flesh become penetrated, serious injury, if not death, will follow.

If not salted regularly in wet spells, diarrhea is apt to follow, with a fouling of the wool in the rear. These "tags" must be promptly removed



SOUTH DOWN EWES.



SOUTH DOWN RAM.



with the shears. If the disease is obstinate, the sheep should be ied for a few days on meal with a little salt in it and other dry food, if the animal can be induced to take it.

For the shearing of sheep clear, warm weather should be selected, not so early as to risk the health of the sheep by cool spells coming after the removal of its winter coat, not so late that this coat has become oppressive or has commenced to waste and shed in order to make way for another.

In butchering the intestines should be removed at the earliest possible moment after life is extinct, and before the removal of the pelt, if necessary, so as to avoid the peculiar sheepy odor and taste sometimes found in mutton, and erroneously supposed to be due to the contact of the wool with the meat.

The same result may be accomplished by pouring a bucket of cold water into the cavity as soon as opened and before the removal of the bowels. With proper attention to the butchering of well fattened sheep, all unpleasant odor or taste will be avoided, and the prejudice which many people feel toward mutton will be removed.

Properly served, lamb or mutton furnishes a meat at once wholesome and much more delicate than the gross hog meat so universally consumed in Georgia.

There are in Georgia nearly 10,000,000 acres of practically unoccupied lands. Nearly all of these could be profitably used as sheepwalks. There is an extensive region, beginning in Southeastern Georgia and extending across the State from the Savannah to the Chattahoochee. This section is made an ideal home for great flocks of sheep by the native wire-grass and other herbage which, with their luxuriant growth, afford excellent summer pasturage, while the aftermath, remaining evergreen and reinforced by healthful winter-growing weeds, gives ample feed for the cold season. Besides, there is the Bermuda, most valuable of all spontaneous grasses, equal on good soil to the best blue-grass of Kentucky, and capable, even on land unprofitable for cultivation, of supporting five sheep to the acre for nine months of the year. Where partially protected by pine trees, it will remain green throughout the winter, supplying pasturage for that season. Or from the summer pasturage the sheep may be turned upon the pea fields from which the corn has been gathered, care having first been taken to accustom them to the consumption of the pea, as a guard against over-feeding. From the pea-field they can be turned into the cotton-field, which in August or September had been sown in rye or oats. These, together with the rutabaga turnip crop, which was also sown in July and August, will afford ample green pasturage until the return of the spring vegetation. Or, if a harvest from

the grain fields be desired, the turnips can be reserved for early spring feeding, since such a grain field should not be grazed upon later than the first or last of February, according to latitude. Such is the advantage of the climate of Middle and Southern Georgia, that small grain can furnish green pasturage all winter, and a paying crop the next summer. In the southern half of Georgia turnips need no protection, and can be utilized with no more labor than is required to change a movable fence as often as fresh pasturage is needed; or they may be banked like sweet potatoes, and in the spring be fed, after being reduced by a pulping machine. Wherever the sheep are fed, either on extensive "walks" or inclosed in narrower bounds, they heavily fertilize the soil.

One great economical consideration in Georgia's favor is, that in its larger portion sheep do not need winter shelter.

By utilizing Bermuda and wire-grass for summer pasturage, and small grain and turnips for winter, Georgia, without neglecting her cotton, corn, grain or forage crops, and while increasing the number of her dairy farms and creameries, her beef cattle and her swine, and extending her factories of varied kinds, can build up another great industry of sheep husbandry, supplying her own markets and those of other States with the best of mutton and lamb, and deriving a large profit from the sale of millions of pounds of wool. Georgia can easily sustain 4,000,000 sheep and at the same time largely increase her agricultural products by converting much wasting vegetable matter into a superior fertilizer.

In the portions of Georgia where the sheep can have extensive range, they, for the most part, take care of themselves without taxing either the time or attention of their owners. It was in consideration of this fact that Mr. Janes, Georgia's first Commissioner of Agriculture, spoke of sheep as "the best, most quiet, peaceable, industrious and profitable laborers, who nearly double their number annually, demand no wages, do not steal or commit other crimes, labor assiduously throughout the year, feed and clothe themselves and their masters, make no strikes, utter no complaint, and never 'die in debt to man,' "

There are sections of Georgia which do not afford such extensive sheep-walks or ranges, and where those who prefer these sections for climatic or other causes must, if they desire to engage in the business of sheep-husbandry, grow their sheep upon inclosed farms and provide for them shelter against the inclement winter. Let such remember that millions of the best sheep in the world are raised upon inclosed pastures in England, upon the continent of Europe (especially in France), and in America. With one tithe of the care, attention, expense and worry bestowed upon cotton devoted to sheep-husbandry, the latter can be made

to quadruple the net profits of cotton culture on any given area of dry and reasonably fertile land in Georgia. The fact that the native flocks of sheep in the southern part of the State, without attention prove profitable to their owners, furnishes abundant evidence that under a more rational system in which ewes and lambs, at least, would have the benefit of small grain pastures, or other suitable feed during the winter months, the profits would be much larger than under the present "let-alone" plan. Our neighbors just to the north of us, Tennessee and Kentucky, make enormous annual profits on early spring lambs shipped to New York and Boston. "Georgia" says Mr. Henderson, "might anticipate these sources of supply at least one month, by having the lambs dropped in November and grown upon succulent pastures of small grain sown for the purpose. If butchered beef can be profitably shipped from Chicago to Georgia markets in refrigerator cars, why may not our early lambs be shipped to Chicago in the returning cars?"

The offspring of Cotswold bucks and native ewes would be little, if at all, inferior to the thoroughbred for mutton.

Notwithstanding the risk of depredation by dogs, sheep-husbandry can be made profitable in Georgia if proper attention is bestowed upon the sheep. A single, faithful hired man can care for a thousand sheep, except at shearing time, when extra labor will be needed. The annual net income from the flock would exceed that from an area equal to the sheep pastures planted in cotton. There are few farms in Georgia on which it will not pay to pasture some sheep. Those inexperienced in sheep-husbandry should begin with a small number, which may be increased in proportion to their growth in experience and skill. To those who have experience in this business we say: "There is room enough and a hearty welcome in Georgia for you all."

To those of our own people, who depend upon agriculture for a livelihood we commend the words of Charles L. Flint, for twenty-eight consecutive years secretary of the State Board of Agriculture of Massachusetts, author of several valuable treatises on subjects pertaining to the farm, and editor of others, especially of *The American Farmer* published by Ralph H. Park & Co. of Hartford, Conn.:

"Unlike the culture of cotton and other textile materials, the cultivation of which is confined to certain localities of our country, wool-growing can be successfully practiced in every State in the Union and its territories, being suited to all soils and climates. The South and West are sections peculiarly adapted to this enterprise, while in New England it must of necessity be limited, owing to the density of the population and the small size of the farms in that section. In the south the season

for winter feeding is much shorter than at the North, affording an opportunity to depend more upon pasturage in maintaining the flocks, while the well-sheltered valleys afford protection from the severity of storms in winter and induce an early growth of spring grasses. The infertile and worn-out lands can by this means be reclaimed to cultivation and fertility. By the more general recognition of sheep-husbandry as an adjunct of southern agriculture, for a few years, a marked improvement in soil, general agriculture and State wealth must of necessity follow. The remarkable success attending wool-growing in New South Wales, which is a region of excessive heat, proves what can be accomplished."

In an article on "Wool Industry in our National Economy" Hon. John L. Hayes says: "The relations of domestic wool to domestic manufactures are equally conspicuous and important—the rule being that the characteristic wool manufactures of the leading nations have been determined by the abundance and peculiarities of their raw material."

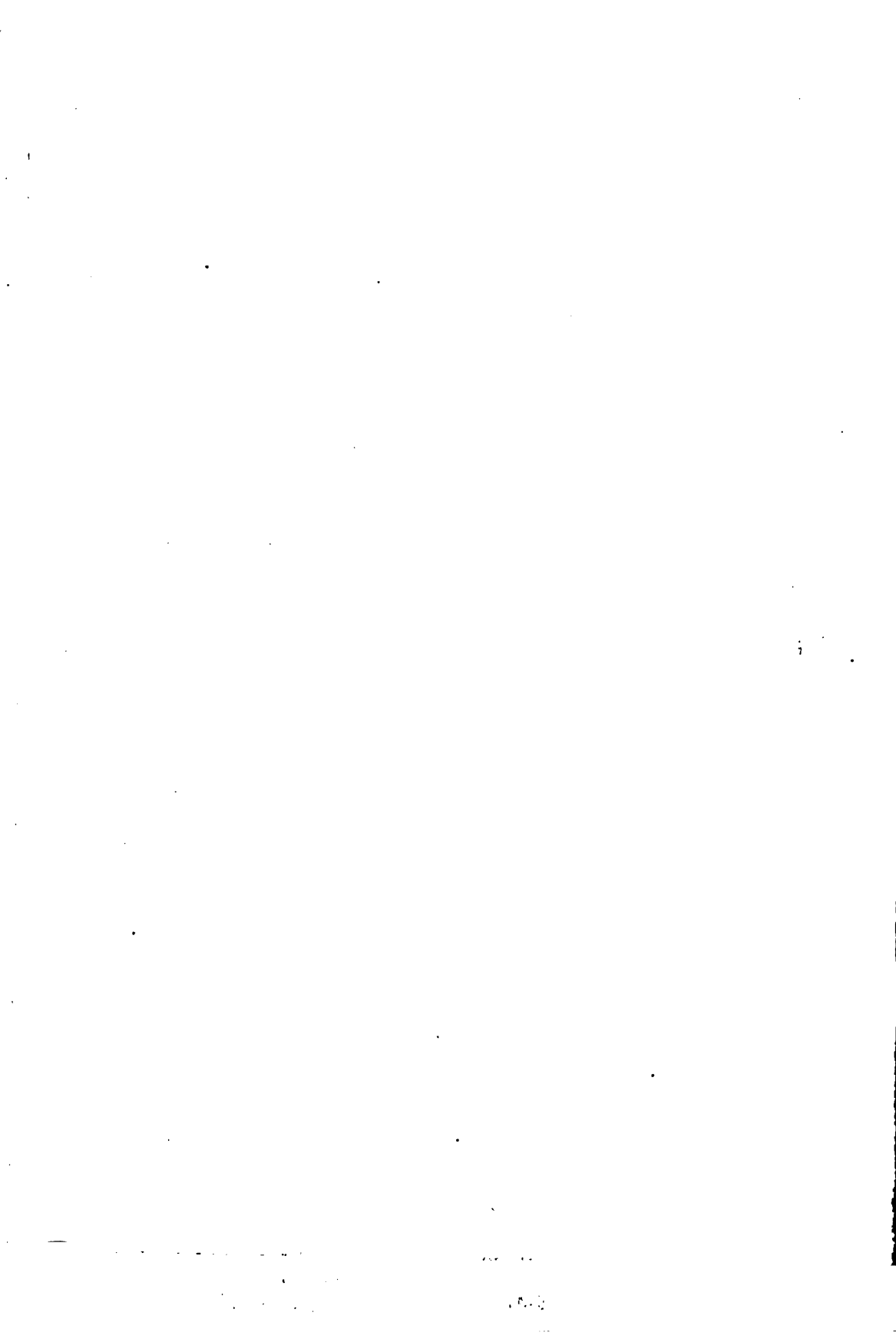
After citing as examples the carpets and rugs of Turkey, the dress fabrics of England, the fine broadcloths of Germany, and the infinite variety of the luxurious dress-goods of France, and showing how all of these great enterprises grew out of the sheep-husbandry of those countries, Mr. Hayes continues: "The wool manufacture of the United States is dependent upon domestic wool production. The two branches of wool industry have always stepped together. The more prominent wool-growing States have woolen-mills. It is safe to say that not one of these mills would have been established but for the contiguous flocks, and if forced to seek imported wool, each one would stop."

But some one may say, what has the farmer to do with woolen-mills? How does their establishment concern him? Much every way. Whatever increases the demand for his products increases his opportunities for profitable business and the legitimate acquisition of wealth. The farmers of those sections of Georgia adapted to sheep-raising, can, by an intelligent use of the resources within their reach, help to build up new manufacturing industries, which, as they increase in number and in financial strength, will amply reward the thrift and enterprise of those on whose well-directed work their own success depends. Thus agriculture manufactures and commerce, going hand-in-hand, and mutually dependent, will by their united energies place Georgia in the front rank of the richest, greatest and most populous commonwealths that constitute our grand American Union.

In 1890 there were in Georgia 440,459 sheep on farms, and their wool-clip was 841,141 pounds. The census did not say whether the wool included washed and unwashed. According to the annual report of the



REARED IN GEORGIA BY BELMONT FARM,
SMYRNA, GA., Cobb Co.



Bureau of Animal Industry published by the United States Department of Agriculture in 1899, there were in Georgia at that time 294,826 sheep, and their wool-clip was 1,218,612 pounds, washed and unwashed, of which 731,167 pounds were reported as scoured wool.

The Yearbook of the Department of Agriculture for 1900 reports 271,534 sheep sheared, their wool-clip being 1,086,136 pounds washed and unwashed, and 651,682 pounds scoured wool. The sheep kept in inclosures are reported by the census to be 5,745.

POULTRY.

There is scarcely any food more highly appreciated by the great majority of people than the flesh and eggs of the various kinds of poultry to be found on almost any farm. Even the poor man, with but a few acres owned or rented, can, with a little care, raise enough chickens, turkeys, geese and ducks to supply his own table with the wholesome and palatable food which they afford.

Very few people keep any account of the expense and profit of poultry. If you were to ask them whether it pays, they could not tell; for they keep no account of eggs or chickens used or sold, or of the cost of the food consumed by them. The commonest fowls, that are left to shift for themselves, at least pay their way. Take those same fowls and give them the care and attention that all poultry should have, and they will bring in a handsome profit on the investment.

One of the secrets of the success of agriculture in France, is the attention bestowed upon the small industries of the farm; and one reason why many of our farmers fail to make as large profit as they might, is their neglect of small things. With proper attention to shelter, feeding and cleanliness of the fowls, the breeds commonly known throughout our State will not only supply the farmer's own table, but also prove a profitable part of his farm produce. There is always a good and unfailing market in our cities and towns for poultry and eggs, and the demand for these articles will increase with the growth of our municipal population. In fact, there is nothing on which the small farmer can more securely depend. Every true woman delights to be a helpmeet to her husband, or her father, not only by economy and saving at every possible point, but by the wise planning of her head and the diligent labor of her hands. Nothing better suits the farmer's wife or daughters than the care of the poultry. And in this task there is abundant need and opportunity for the employment of tact, skill and scientific knowledge.

Let it be understood that the intelligent application of one's knowledge or experience, even though that one be a person unlettered and unlearned, is scientific. The female members of a household on a small

farm, which affords but one or two milch-cows, a few hogs, a few beehives, and some poultry, can, by thrift and economy, furnish a large proportion of all the food consumed by the family, keeping the table supplied with milk, butter, honey, chickens and eggs, looking after all the wants of the home, while father or brothers drive the plow, or with their single mule, perchance, carry to market the little surplus that remains over and above the supply of their own needs. Many a thrifty household, in which each member lends a helping hand, has, by wise management, been able to add from time to time a few acres to their possessions until the small farm has become a large one, and their intelligent industry has been rewarded by competence and ease.

The poultry has so often, like the hogs and sheep, been left to shift for itself, that the profits derived from this industry, where well managed, have in many instances been greatly underestimated or altogether overlooked.

In considering this subject a very important question is: "What are the best breeds for Georgia?"

Of chickens the preponderance of evidence reported by correspondents continues to favor the Plymouth Rock, if but one breed is to be kept. Next in favor for general purposes comes the Light Brahma. The Leghorn is the universal favorite for egg production, the Brown variety being generally preferred. In his "Manual on Poultry" published in 1883, Mr. Henderson gave the testimony of some of the most experienced breeders in Georgia. Mr. Edgar Ross of Bibb county, after experimenting with more than twenty varieties, said that the Brown Leghorn gave the most satisfactory result as a combination fowl for eggs and table use. "They are excellent egg-producers, summer and winter, and the chicks mature rapidly, being ready for the table at ten weeks old—flesh of excellent quality." He pronounced the White Leghorns as good layers as the Brown, but preferred the latter on account of their color. They begin laying when five months old.

After making every conceivable cross with twenty odd varieties of thoroughbreds and common stock, he considered the cross of the Leghorn and Light Brahma the most satisfactory. Brahmas are excellent mothers and good egg-producers. Leghorns are the best of layers, but are non-sitters. The cross between them possesses both the qualities to perfection, losing the clumsiness of the Brahma and inheriting the activity of the Leghorn.

Mr. F. N. Wilder of Monroe county, who had bred the Light Brahma, Dark Brahma, Brown Leghorn and Plymouth Rock, preferred the Light Brahma as a combination fowl, which he thought unsurpassed as a table fowl. He fed his chickens regularly, and always had fresh water access-



VIEW OF CHICKEN HOUSES AND RUNS, BELMONT FARM, SMYRNA, GA.

ible to them in clean earthen vessels, putting in a few drops of carbolic acid twice a week. He kept their quarters clean and free from vermin, and provided them with good dust baths into which a little sulphur was occasionally poured. Occasionally he hauled a load of cinders from the blacksmith's shop into their yards.

Messrs. J. T. Scott & Bro. of Crawfish Springs, in Walker county, North Georgia, obtained satisfactory results from some breeds not approved by breeders farther south. They tried both the Dark and Light Brahma, the Partridge, Buff and White Cochins, the Brown and White Leghorns, Plymouth Rocks, Black Hamburgs, Golden-Spangled Hamburgs, Houdans, etc.

Mr. W. C. Tate of Overton P. O., Elbert county, one of the most successful raisers of poultry in Georgia, raising annually from 300 to 500 chickens, after having tried the Langshans, Buff Cochins and many of the other special breeds, in conversation last summer (1900), said that he considered the Indian Game the best of all for general purposes, and that he had for the last six years practically discarded all others. They are a hardy, thrifty, compact, closely-built fowl, the hens weighing from four to six pounds, and the cocks from six to eight, making excellent meat for the table.

The game is certainly the typical breed, most closely resembling the wild parent, the *Gallus Bankiva* of Southeastern Asia. The hens are good layers, superior sitters and unsurpassed mothers, too much disposed to fight young chicks of other broods, but with great spirit defending their own brood against all intruders.

Our common Black-red Game, nearest kin of all our domestic fowls to the common ancestor of them all, the Jungle fowl or *Gallus Bankiva*, is the variety from which so many sub-varieties have been bred by selection or crossing with others.

The Dominiques, in their plain homespun suits, were once a favorite among the older American breeds. The Plymouth Rocks, now so highly esteemed, are supposed to be a cross between the Black Java or Cochin and the Dominique. Of the later breeds the Wyandottes and Sebrights are growing in favor.

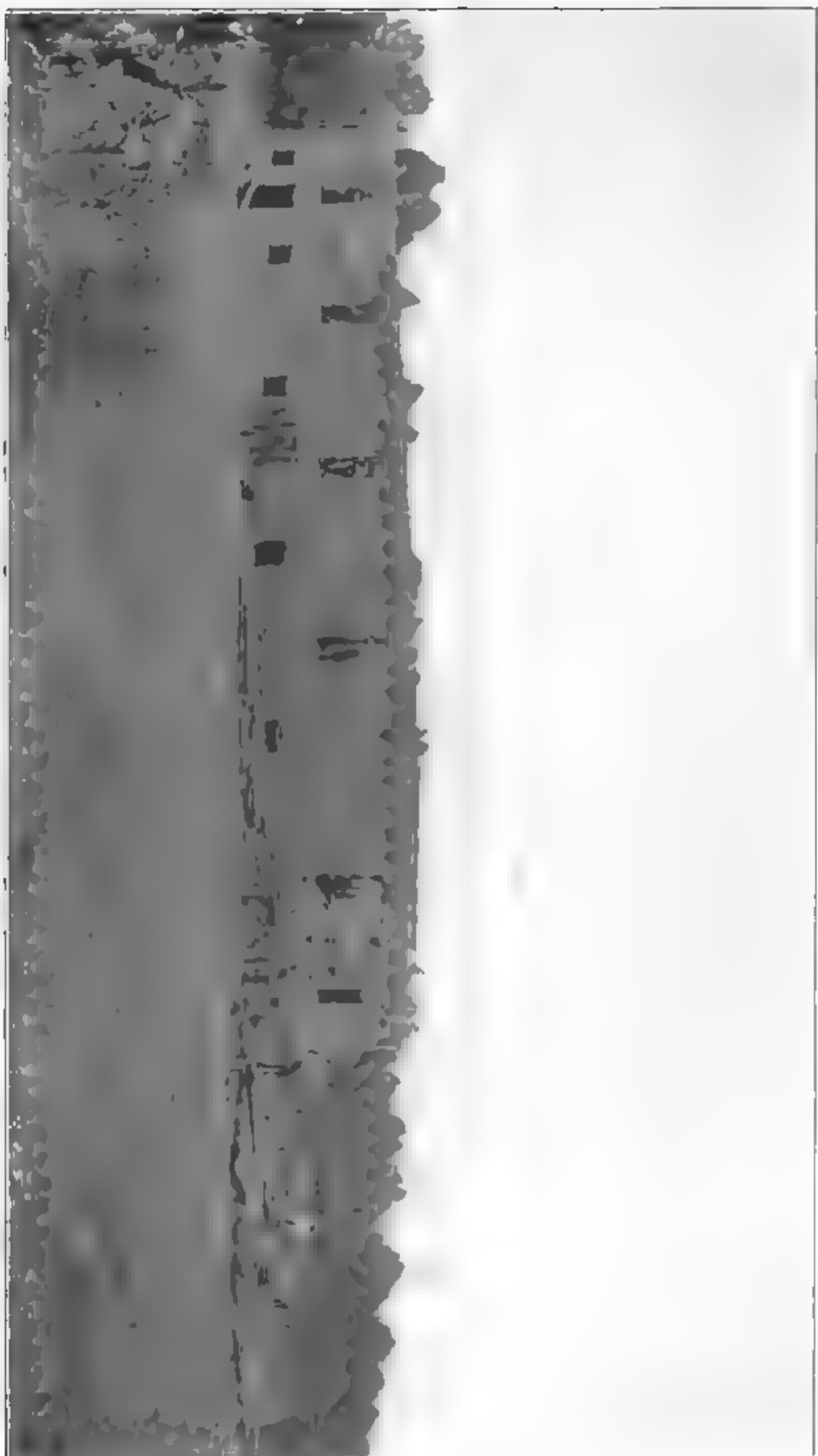
The variety to be grown should in a great measure depend upon the extent of the range available. All of the smaller varieties require a liberal range for maximum production. The larger breeds, such as Cochins, Brahmas, etc., though thriving better with a tolerably wide range, suffer less from close confinement than Leghorns, Games and other small varieties. If the fowls must be confined to a small area, then the breeder must supply by artificial means the conditions of the wider range.

Birds at liberty to roam find for their sustenance seeds of various kinds, a variety of green vegetable matter and insects. If confined within narrow bounds, they must be supplied with what they desire and need, by the foresight and provident care of the owner. Otherwise the fowls will suffer privation and become unprofitable. If there is not an abundant supply of perennial grass to which the fowls have daily access, small grain of some kind should be sown for them as pasturage for fall, winter and early spring. Breeders of poultry in Georgia do not need to construct close houses for their shelter. In our warm climate such houses are sources of disease and death to the poor birds, by reason of the impure air which they breathe. Mr. Henderson says: "They may be used during the winter months to advantage, if well ventilated, but the fowls should be excluded from them from May 1st to October 1st, and required to roost either in trees or open sheds. Thorough ventilation is absolutely necessary, even in winter, to prevent disease." The ventilation should be above the roost. The roof of the chicken-house should be close enough to keep out the rain and all its sides, except the south, should be close enough to exclude the cold winds.

It is better to let the fowls roost on trees, where the whole body is exposed alike to the cold than to be confined in a house, in which they are exposed to draughts of cold air. The roosts should not be higher than thirty inches from the floor of the house, or eighteen from its sides. If too high, the larger breeds will be apt to injure themselves in getting up or down. It is a good plan to place a shelf about two feet wide immediately under the roost and about eighteen inches from the floor. Over the shelf should be sprinkled coal ashes or cottonseed to catch the droppings, which should be collected and removed every two or three days. The floor of the chicken-house, whether of dirt, planks or cement, should be occasionally sprinkled with diluted sulphuric acid, which should be carefully handled, so as to avoid injury to the clothing or person of those applying it. Thorough whitewashing twice a year helps to purify the house and keep it clear from hurtful insects. Fumigation with tobacco smoke is very beneficial.

It is better to make the nest upon the ground than upon planks. A nest of green cotton seed hollowed into the form in which the hen prepares it when left to herself, is in some way offensive to mites and other injurious insects. The material of the nests that have been used by sitting hens should be entirely removed and either burned or thrown into the manure pile.

In the climate of Georgia fowls are more healthy if required to roost in the trees during the summer. Indeed, they would be healthier roost-



BROODERY AND INCUBATOR HOUSE (IN COURSE OF ERECTION) BELMONT FARM, SMYRNA, GA.

ing on trees throughout the year; but will produce more eggs in winter if kept in comfortable houses.

The appearance of disease among poultry is generally the result of neglect. If contagious diseases appear, the best plan is to kill the diseased fowls, and either burn or bury them at a distance from the run of the balance of the flock. Then the premises should be immediately disinfected by the use of sulphuric acid, all the well birds being kept from the yard, if possible, until the disinfection is complete.

By universal consent the turkey is considered a native of the western continent. All our domestic breeds of turkeys probably have a common origin from some one of the original types of wild turkeys. The principal varieties of domestic turkeys are the Bronze, the Cambridge, the White Holland and the Norfolk.

The Bronze in his plumage resembles very closely the common wild turkey of our forest (*Meleagris Americana*), and seems to be the result of a cross of the wild gobbler upon the domestic hen. Turkeys of this breed are very handsome and much larger at maturity than those of other breeds, the gobblers sometimes weighing as much as forty pounds. They retain more of the traits of the wild turkey and cannot be kept unless the farm affords them an abundant range.

Other breeds are more domestic, but are of smaller size and less hardy. Many turkeys are of variegated colors, which results from the intermixture of various breeds.

Very little attention has been paid to their breeding in comparison with that given to chickens. The bronze variety is the result of greater care in this respect.

The breeding of turkeys on a small scale is not apt to be profitable, but on large farms, where they have the run of the stubble after grain has been harvested, they can be raised with small cost and little trouble.

The hens begin to lay in early spring and lay from twelve to eighteen eggs each. If allowed to do so, they will seek their nests in some secluded spot, where they will not be disturbed by the gobbler who, by his awkward attentions, sometimes damages the eggs. Some allow the turkey hens to have their liberty. Others take them to houses, as soon as they show an inclination to brood, while others shut them up and compel them to lay in the house, where they are to sit. If not disturbed, they usually hatch well under any of these plans.

In the *American Farmer* a poultry-breeder gives his experience thus: "All the first lot of eggs received I placed under hens for hatching, and you will find that the turkeys will have finished their second laying a few days before the hens have finished hatching. I then take the

eggs from the hens and give them to the turkeys, and sometimes the turkey has only to sit a few days, when she has her young. If I am compelled to leave some of the eggs with the fowls to bring out, I deem it an indispensable requisite to see to it that the hen is perfectly free from lice, using pulverized sulphur, etc., freely. I regard it as next to impossible for hens to raise young turkeys, for turkeys are exceedingly tender when young, and above all things they must be kept free from the parasites that infest the common fowl. They must not even be allowed to remain over night about the same building, where the common chickens are kept. Do not be afraid of putting as many as forty or fifty young turkeys with the old mother turkey, but keep them in a dry, warm place, especially over night."

Young turkeys should be scrupulously protected from rain and not allowed to run in grass, which is wet with dew or rain. The floor of their pen must be kept dry and clean, and pure, fresh water must be constantly within their reach.

Young turkeys do not need to eat at all, until two days old. The utmost care must be taken in feeding them. Hard boiled eggs, or curd pressed every day, will prove the safest food for the first two weeks. After this, bread, soaked in just enough milk to soften it, is a safe and healthful food. The health of the chicks will be materially aided by feeding to them the tender tops of onions, garden fennel, purslane or dandelion, chopped fine and mixed with other food.

Young turkeys are delicate until the red begins to appear upon their heads. From that time they are hardy, and, if allowed a liberal range, will take care of themselves.

In rearing large, strong turkeys, much depends upon careful selection of the breeding stock. The practice of sending to market, about the time of Thanksgiving or Christmas, all the largest and heaviest birds, and keeping only the late ones of inferior size for breeding purposes, is a bad one. The turkey does not attain its full maturity until the third year. Some of the largest should always be kept; for from matured parents only can the largest and strongest chicks be secured.

Every year thousands of dressed chickens and turkeys are shipped from Tennessee to our Georgia cities and towns. Why cannot our own farmers supply this demand and keep the money at home that now goes beyond the limits of the State?

All the varieties of guinea fowls are supposed to have originated in Africa. Some have a peculiar bone-like helmet on the top of the head, while others have in its place a crest of feathers. They are very useful where there are many enemies to poultry, such as hawks, crows, rats, etc.

Being ever on the alert, they give the danger alarm with a loud shrill cry. An extensive poultry-keeper says of them: "To any one keeping a large number of hens a pair of guineas is a good investment. I know from experience that they will, and do, keep hawks away..... We have for several years past lost but one chicken by the hawks." They are prolific layers during the summer season. Their eggs are small, but rich in flavor, and make up in numbers for what they lack in size.

A good plan is to let chicken hens raise the young guineas, as they grow up more gentle and manageable than when reared by the guinea hen. Their flesh is very palatable to those who like a gamy flavor and dark meat.

The peafowl is an ornamental bird, and is peculiarly appropriate to spacious grounds or lawns, but is not much desired by poultry-raisers.

Ducks and geese may be successfully raised under domestication, without more water than is afforded by an ordinary drinking trough; but since in the wild state they live a great part of the time upon the water, when domesticated, they will seek water, if it is in reach. The five principal varieties of thoroughbred ducks are the Pekin, Aylesbury, Rouen, Cayuga and Muscovy, each of which has its fanciers. The common duck seems to be a degenerate descendant of the Rouen, which it strikingly resembles in its plumage.

Geese, while not generally prolific, can be more cheaply raised than any other domestic fowl, if supplied with abundant green pastures. Goslings need feeding only a few weeks, during which time it is well to give them soaked bread or boiled potatoes, mixed with meal, allowing them also to run on the grass with the mother goose. If, after two weeks, they have access to tender grass, they will thrive without other food, if they have dry shelter in cool nights.

Artificial incubators of various patterns have been largely introduced. When properly managed they prove very successful, and are useful in that they produce a much greater number of broilers for the table than can be obtained under ordinary methods.

By the United States census reports of 1890 the number of domestic fowls reported for Georgia was as follows: chickens, 7,357,934; turkeys, 148,797; geese, 291,676; ducks, 105,537. The number of eggs produced was 11,522,788 dozen. The pounds of honey produced were 1,757,758, and the pounds of wax, 49,935.

In France and some portions of England, it is customary for the ladies of the household to take charge of the poultry. This custom prevails on some of the farms in our State, and it would be well if it were more universal. A writer quoted in the *American Farmer* has well said:

"We can assure the ladies that in this specialty there is great scope for the exercise of the esthetic perceptions. What can be more beautiful, for instance, than the penciling of the gold and silver Hamburgs; the exquisite harmony of color which the best-bred gray Dorking pullets exhibit, and which, we think, come nearer the wild game birds of the country in beauty of form and plumage than any other? Then there are the numerous strains of game fowls, the *preux chevaliers* of their race, unexcelled in splendor of plumage and unequalled in grace of form and carriage; the Houdans, helmeted like cuisassiers, and the plumed Crève-cœurs, the *black horse cavalry* of the poultry yard; the La Fleche with its branching antlers, and the Black Spanish and Leghorns with battlemented combs of the brightest crimson, flaming above the raven and snow of their plumage, entitle them to be considered the *color guard* of the grand poultry army. Then there are the stately Brahmas and Cochins, the giants of their race; the Black Polands with their crowns of snow, and their golden and silver cousins beautifully marked; and last come the sprightly little Bantams, whose pencilings have made immortal the name of Sir John Sebright, and whose tints are almost as various as the wild flowers of spring. Is there not a field here sufficient to tempt the most esthetic taste?"

The Goat.—The much abused goat, the delight of the small boy, and the butt of the wit, the animal whose destructive propensities and wonderful digestive powers have furnished many a joke, has his good traits, and with proper management becomes a useful member of the great society of dumb laborers, who spend their days and lay down their lives in the service of man. The farmer who keeps a little flock of them, shut in upon a suitable range, will, when he wishes to make merry with his friends, find no richer feast for them than the well-prepared flesh of a tender kid. To those who keep even the common goat in large numbers, there is a good source of profit in their skins. There is a steadily increasing annual importation into the United States of goatskins for necessary use in home manufactures. The invoice value of these imports was in 1898 \$15,500,000, and the market value probably over \$25,500,000. The production in the United States is comparatively none. And yet there are in all the States of the West and South large areas of unimproved land which could be well employed in the feeding of goats for a profit. Through much of the area are mountain chains, and these are the favorite pasture ranges of the goat. If all the goats in the United States were kept with the single object of supplying skins for the market, they would fail to supply a small fraction of the present demand, and at the same time remain at their present number. Estimating four pounds to



ANGORA GOATS.

the skin, which is about the average weight of dry skins, it would require the slaughter of 16,261,621 goats and kids to yield the skins imported during 1898.

A large proportion of our stock of common goats is kept in the suburbs of cities. In the West many of them are kept with sheep as a protection against dogs, wolves and coyotes; while the increasing flocks of Angoras are kept chiefly for their yield of mohair.

The goat thrives in all climates outside of the polar regions. Hence most of the area of the United States, with the possible exception of Alaska, is favorable to the goat family generally, and much of the Pacific slope, the southwest and the south, is particularly adapted to the long-fleeced varieties, such as the Angora. Mr. J. T. Henderson, Commissioner of Agriculture of Georgia in 1885, in his annual report for that year said: "Experiments in the raising and keeping of the Angora goat in these mountain pastures are making a very favorable impression. It is thought with some reason, that this particular branch of stock raising may be easily carried to a very large and important development in our mountain counties. The adaptedness of this locality to the raising and support of the Angora has been so marked that those accustomed to the care of this valuable animal are sanguine that we shall see in the near future a very important source of profit in this branch of industry. . . . It is hardly possible that the native habitat of the Angora is better adapted to its keep and development than are the mountain counties of this State." In 1878 Colonel Richard Peters, of Atlanta, wrote to Mr. John L. Hayes:

"In this connection I may say a few words about the Angora goat, very improperly termed the 'Cashmere.' I have owned these animals from six different importations, those brought over by Dr. J. B. Davis in 1848, proving to be superior in many respects to any of the more recent importations. One of the most valuable, interesting and remarkable traits of the Angora is the rapidity with which fleece-bearing goats can be obtained by using thoroughbred bucks to cross on the common short-haired ewe goats of the country.

• I have had great success with the Angoras and regard them as one of the most valuable acquisitions to the resources of our husbandry. They have yielded me more substantial pecuniary profit than any other of my extended stock investments."

Mr. J. W. Watts of Laurens county, South Carolina, in a letter to Mr. Hayes in December, 1877, said:

"Even here, seventy-five miles from the mountains, I have for six years grown most successfully the Angora goat, whose flesh I regard as

superior to any mutton, and whose fleece properly handled could there (in the Blue Ridge Mountain region) be made more profitable than any wool-growing. In a cross I have made with a pure Angora buck and a Maltese ewe goat, I have raised a ewe goat that will give four quarts per day of as good milk as any cow on my plantation. The feed of one of my cows will keep twelve goats. My cows must have certain food or they will not thrive. My goats will eat anything, almost, and do well; and with this advantage also, that their milk and butter are not in any way affected by their diet.

The ease with which they can be kept, feeding as they do on weeds, briars and other coarse herbage, fits them for sections where sheep cannot be raised to advantage. Their readiness and ability to defend themselves against dogs is greatly in their favor. A flock of valuable wool-bearing goats can be raised in a few years by using thoroughbred bucks.

If it be desired to raise these animals for profit, much might be derived from the sale of the skins, for which there is such heavy demand in the United States. There is also a good market value for their flesh, tallow, bones, hoofs and horns. The females, which always constitute the larger portion of the flock, possess considerable value also in milk for household uses, or which can be converted into the most salable cheese, similar and equal to the Roquefort, Mont d'Or, Le Sassenage and Levroux, so highly esteemed in France and Switzerland.

Herded goats, under suitable conditions, whether for skin, fleece or by-products, will pay a good profit on the investment.

SPECIAL INFORMATION CONCERNING THE ANGORA GOAT.

In view of the many inquiries that have come to the Department of Agriculture concerning Angora goats, it has been considered best to give some special information on this subject.

The first importation of Angoras into the United States was from Turkey in 1848, by Dr. James B. Davis of South Carolina, who two years before had been appointed by President Polk to visit that country in response to a request from the Turkish government for the president to send a man to them who understood cotton culture. On the return of Dr. Davis to the United States, he brought with him nine Angora goats. Colonel Richard Peters of Atlanta, Georgia, secured two pair of these. By the year 1854 he had crossed his thoroughbred bucks and the common does, and was so well pleased that he visited the farm of Dr. Davis in South Carolina and purchased the remainder of the importa-

tion with its increase. "These," says Mr. C. P. Bailey, the great Angora farmer of California, "were the only Angoras imported into the United States up to 1866." In that year Mr. W. W. Chenery of Boston, Massachusetts, secured a shipment from Turkey and sent seven head to California, one of which died on the way. Two of the remaining six were purchased by Mr. C. P. Bailey of San Jose, California, at five hundred dollars a head, and this was the first importation into California of thoroughbred Angora goats.

By two subsequent importations in 1869, by Israel Diehl, United States Minister to Turkey and Charles S. Brown of Ohio, and in 1876 by Messrs. Hall and Harris, Mr. Bailey has added to his original purchase, and now from their descendants has a flock which runs up into the thousands. His great success in the raising of Angoras makes him authority on this subject, and we are glad to avail ourselves of his knowledge and experience, as given in a little pamphlet on "California Angoras."

One of the principal features of the Angora business is the Mohair, whose handling and care is therefore of prime importance.

In the first place, special care must be given to the time and methods of shearing. A general rule is to shear as early in the spring as is safe, because the earlier the mohair can be taken off without too much risk from storms, the better it is for the fleeces, as they are more oily and lustrous before the animal begins to shed. Where there is any danger of snows and storms late in the spring, the first of April is early enough for the shearing, which should be done early enough to save the hair.

If inclement weather, with cold rains or sleet, should follow the shearing, the animals must be carefully protected for a while. The ewes especially must be sheltered, for, if they should become thoroughly chilled, they would be liable to drop their young before the time. Sheds should be provided for them for shelter during storms or cold nights. These sheds need not be very elaborate, for, if left partially open, they will dry quicker after a wet storm.

Mr. Bailey thinks it better to shear but once a year, since one long fleece pays better than two short clips. However, it is the common practice to shear twice a year in California, the first of September and the first of April. Care should be taken not to make two cuts in the hair, the short or second cut being entirely worthless and very undesirable at the mills. Start the shearing at the top of the neck where the hair divides and continue down the side of the neck, keeping the fleece intact. This will prevent the cutting in two of the long locks on the side of the

neck. Rough handling must be avoided, especially of the ewes, which are very tender at shearing time.

As soon as knives shall have been made that will shear Angoras as well as they do sheep, and will not clog with the mohair, machine shearing will be as popular with the goat men as it is now with those who handle sheep. The great advantage of machine shears over hand shears is that they shear clean and smooth, without cutting the hair twice or injuring the goat's skin.

After the fleece is entirely off and the wool on the face and legs clipped, spread the hair out on the floor and cut off all tags. Then the fleece should be turned with the outside out and tied with good sewing twine—not the ordinary wool twine.

The kid hair should be kept separate, for it always brings the best price. Care should be taken that there may be no straw or dirt in the sack in which the wool is packed. The hair, after reaching the mills is cleaned and made into various fabrics, being often mixed with wool or cotton.

The most common articles of mohair manufacture are plushes, such as are used for upholstering furniture, for ladies' dress goods, figured cloth, braids, rugs, robes, and ornamental furnishings. American grown mohair finds a ready market in New York and Boston, and is manufactured largely in Massachusetts and Maine.

The price of mohair depends upon its fineness and length. The purer-bred the goat is, the finer its hair will be and the better price will it command.

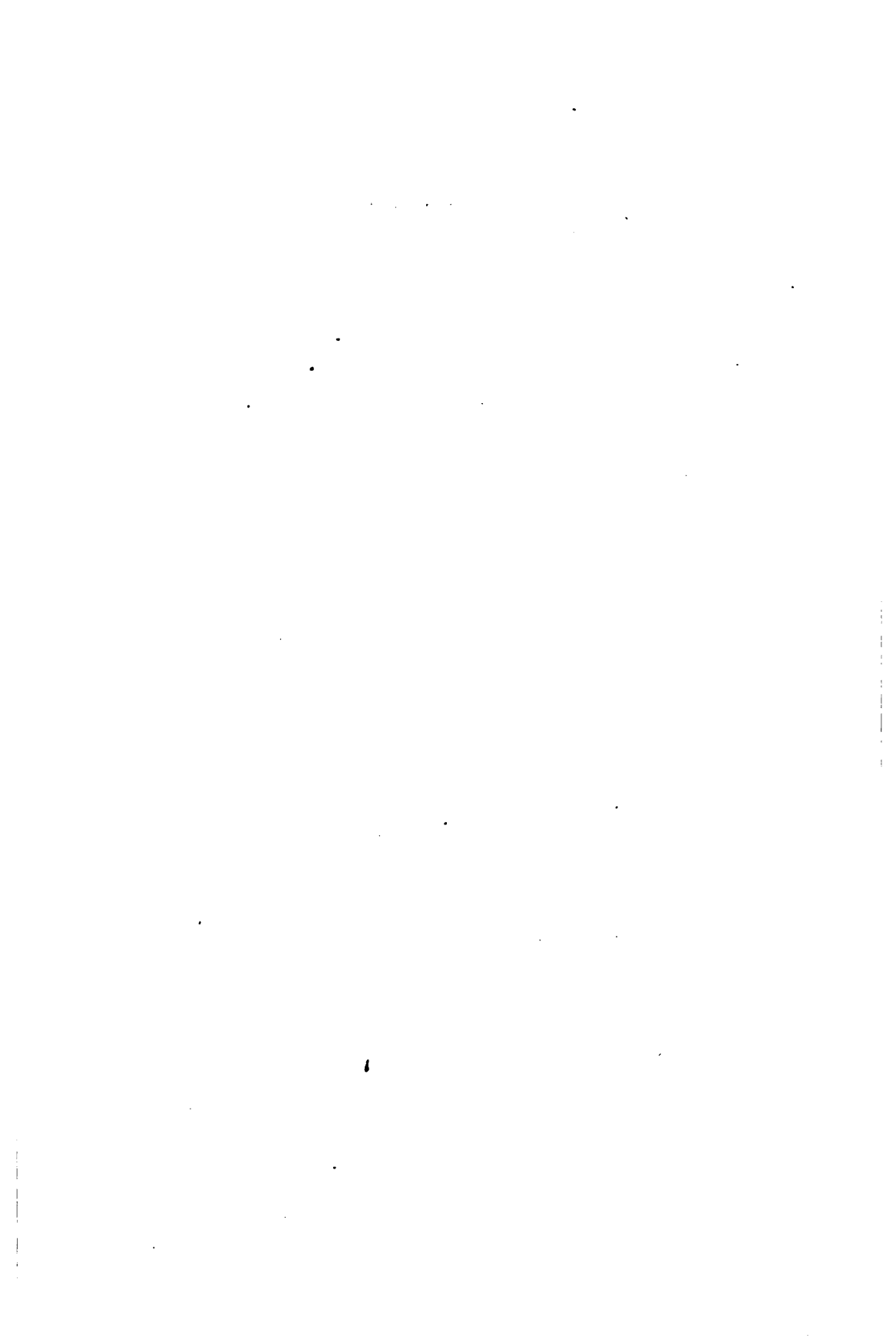
The skin of the goat is also the basis for quite an industry. Leather skins are obtained chiefly from the common goat. Large numbers of common goat skins are imported into the United States annually, and according to Mr. Barnes of the United States Department of Agriculture the value of the importation for 1900 was \$25,000,000. The Vici kid, so popular for shoes, is made from the common goat skin, as is also a fine grade of glove leather.

The skin of the Angora is used for rugs, robes and trimmings. It must be taken off properly and stretched in the shade to dry, or else it should be well salted. The skin should not be allowed to lap over on the flesh side, because it is likely to heat. They should never be thrown in a pile, for the hair will slip, if left for only a few hours, and then the skins are worthless for robes. The hair on the skin should be kept as clean as possible. Shearing skins are classed with common goat skins, and skins of very young kids are of no value.

The best time to take the skin is in the fall, when the goat is fat and



HOUSES AND YARDS FOR BERKSHIRE HOGS, BELMONT FARM, SMYRNA, GA.



has seven or eight months growth of hair. Hair at this time will be much more lustrous and will shake out more readily than after a longer growth.

The meat of the Angora resembles mutton so closely that it is sold in the markets as mutton, though it is really more like venison. The fat of the Angora is more evenly distributed through the meat than in mutton. The goats usually slaughtered are wethers four years old and over.

In clearing brush land there is no more effective worker than the Angora, but he must not be allowed to get into your garden or your field.

A good fence, three feet high, is amply sufficient to hold goats. Three boards, with two barb-wires, or a twenty-four-inch Page woven wire fence, with three barb-wires above will keep them within bounds.

The kidding season is the busy time of the year on the goat ranch. If the weather is good, the task of caring for the young is comparatively easy; but when the weather is stormy and the lands muddy, considerable attention must be given to them. With a bunch of from fifty to two hundred and fifty, and a shed large enough for the entire lot, it is easy to raise a large percentage of kids.

The kids must not be allowed to go out too young, and after birth the kid must be kept with the mother goat long enough for her to know it. If it be found that some of the kids are not being cared for, does, that apparently are not suckling kids, should be caught and held until the unnourished kids have been fed. After a kid gets a good start, he will steal a living from different ewes, if necessary.

Large sized Angora skins are worth from one to two dollars, according to size and condition.

Half breed goats scarcely yield enough hair to pay for the shearing; three-quarters bred goats shear from one to one and a half pounds, worth from 15 to 20 cents a pound; seven-eighths bred goats shear from two to three pounds, worth from 20 to 30 cents a pound; fifteen-sixteenths bred goats shear from three to five pounds, worth from 30 to 45 cents.

Mr. Bailey adds: "the fourth cross, or fifteen-sixteenths, is the lowest grade I would keep exclusively for mohair. The average fleece of pure-bred goats is from four to six pounds; but, frequently, eight and ten pounds have been obtained from choice, well-kept animals."

Goats require less care than sheep.

Shearing must be done as soon in the spring as the hair begins to shed. Otherwise the oil in the hair goes into the body of the animal and loses its life, lustre and weight.

Young Angora does produce the finest and heaviest fleeces. They are in their prime at from two to six years old.

Will Angoras pay? Mr. Bailey answers the question thus:

Cost of 1,000 fifteen-sixteenth grade does	\$5,000
Cost of 20 thoroughbred bucks	500
	<hr/>
	\$5,500
4,000 pounds of mohair will bring	\$1,200
800 kids	2,000
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Total value received	\$3,200
Expenses—Herder, one year	\$420
Extra help at kidding	50
Shearing expenses	50
Taxes and incidentals	80
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Total expenses	— \$630
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Balance, net gain	\$2,570

This is over 46 per cent. on the investment."

In September, 1898, the number of Angora goats in the United States was estimated at 247,000. Texas headed the list with 75,000. Of thirty-two States Georgia came fourteenth with 750. Of common goats the number is not given. The number of all kinds for the whole country was estimated at 500,000. The whole number of goats of every kind in Georgia, kept in barns and inclosures, not on farms or ranges was 2,045 according to the census of 1900.

THE HORSE.

No domestic animal is more intimately associated with man than the horse. As far back as we have any record he has been man's willing, faithful friend, sharing his perils in war, his toil and hardships in travel long and weary, and his labors in all peaceful pursuits of life.

For whatever purpose a horse is to be used, there are certain characteristics which he should possess, without which his usefulness is greatly impaired. These may be stated as a good disposition, strength, endurance and activity. Beauty of form and color and gracefulness in motion are very desirable, though not absolutely essential; and yet it is better to pay a little bit more for a horse that has an attractive appearance than to purchase an ungainly animal, however useful it may be.

A horse with a bad disposition may, by kind treatment, be greatly changed. Yet he is never safe, for it is impossible to tell when his bad temper will crop out and cause him to do infinite mischief.

There are also among horses, as among men, different degrees of intelligence, a due regard to which is very essential in the selection of a good animal, whether for the saddle, carriage, or general purposes of the farm. An intelligent horse is generally more docile, and is safer, because less liable to become frightened.

Strength and endurance are indispensable qualities, and these depend more upon form and muscular development than upon size. Of course these things being equal, the larger the horse is, the stronger the animal. Regular hours for labor and rest will greatly increase the power of the animal for endurance.

On farms where several horses are kept for work, and a special one for the carriage, the heavier draft animal is better suited for the heavy work. But the larger class of farmers can keep only one or two horses. For such, an animal of medium size is the more desirable.

We can not discuss here the points of a horse. Experienced dealers know them well, and a man of little knowledge about these things should, in purchasing, get the assistance of some one who understands such matters.

The diseases of horses are numerous, and in many instances arise from bad management—an improper system of feeding, ill-constructed or poorly ventilated stables, injudicious driving or neglect of proper cleaning. When diseases do occur, quacks should be avoided. Diseased horses should be treated by those who understand their ailments and the remedies for them. Intelligent management will tend greatly to prevent disease, if the animal comes of good, healthy stock.

The number of horses in Georgia on January 1, 1900, was 109,905, valued at \$6,001,626. The number kept in barns and inclosures and not on farms was 21,016, by the United States census of 1900.

This noble animal, the faithful servant of man, deserves at all times the kindest consideration. Careful and sufficient feeding, protection against inclement weather, rough treatment and overwork will increase his usefulness and prolong his days. Georgia possesses every requisite for the raising of the finest breeds of horses for the saddle, the carriage or the work of the farm.

MULES.

For farm use and all kinds of heavy work the mule excels all other animals. He is admirably adapted to work in hot weather, such as would be too severe for the horse or the ox. Therefore he is a favorite in the Southern States. The mule is longer-lived and more hardy than

the horse. He can work for a much longer period, and will thrive with less care, is not subject to as many diseases and, when sick, is more easily cured. A well-bred mule will, with the same amount of attention, outlast two horses. He is not so easily frightened and therefore not so apt to run away as a horse. He is more steady in his draught and less likely to waste his strength. Having a tough skin he is not so much annoyed by flies. The expense of shoeing a mule is only about one third of that required for shoeing a horse, because his hoof is harder and more horny and so slow in its growth, that shoes do not need removal, and will hold on until worn out.

Although they will thrive on fare coarser and much less in quantity than that of horses, yet it is economy in their case and in that of all stock to give them plenty of good food without overfeeding them.

The largest, strongest and best mules are the offspring of improved blooded mares, having as their sire a jack, active and spirited and not less than fifteen hands high.

Mules are too often neglected and abused, and frequently become stubborn from mere self-defense. They are naturally affectionate and patient, and if treated kindly, will be docile and obedient.

The number of mules in Georgia on the first of January, 1900, was 157,008, valued at \$10,826,032. The number kept in barns and inclosures and not on farms was 7,540, according to the census of 1900.



PICKING STRAWBERRIES.

CHAPTER X.

FLORTICULTURE.

SEED FARMS, IRRIGATION, TERRACING.

While flowers and flowering plants have been cultivated in hot-houses and in gardens from the colonial days until now, and while they have been grown for sale to a limited extent for the last one hundred years, the business of the commercial florist in the United States has been developed only within the past thirty-five years and has made its most rapid strides in the last twenty years. In the vicinity of great cities the total value of florists' establishments runs up into the millions, going as high as \$9,254,873 in New York State in 1890. New Jersey, situated between the great cities of New York and Philadelphia, reported for such establishments a valuation of over \$3,600,000 in 1890, making the best showing in this line of business of any State in the Union for its size.

The trade in flowers and flowering plants in Georgia was valued at \$81,932 in 1890, showing that floriculture is beginning to be important enough, to rank as one of the industries of our State. As our cities increase in size, this beautiful business, so congenial to esthetic tastes, will expand more and more.

Of the plants sold the demand for the various kinds varies in different sections of the Union. In the South the favorites are roses, carnations, chrysanthemums, geraniums, palms and pansies. There is also everywhere a growing demand for aquatic plants, and specialists are giving marked attention to them. Regarding the sale of cut flowers the census reports showed that roses were in greatest demand, and that close behind them followed carnations. These two furnished 65 per cent. in value of all cut flowers sold in the United States. Violets, chrysanthemums, lilies, hyacinths, smilax, bouvardia, heliotropes, pansies and tulips in the order named supplied 25 per cent. more, while the other 10 per cent. was made up of orchids, tuberose, mignonettes, primroses, camelias (or japonicas), daffodils and many others, cultivated in a small way to supply

some special or local demand. For instance the beautiful *camelia japonica*, which came in far down on the list in the United States census reports, is decidedly the fall and winter favorite in Augusta and Savannah, blooming in the open air in midwinter in the latter city.

In Georgia there were reported twenty-six florists' establishments, five of which were owned and managed by women. The largest number of square feet of glass reported for the hothouse of one establishment was 15,000 and the smallest 750. The total number of square feet of glass reported in the whole State was 99,918. The number of acres in Georgia devoted to this business in 1890 was 106. In the District of Columbia, where the largest establishment reported 150,000 square feet of glass and the smallest 1,440, with a valuation for all establishments of more than a half million dollars, only 61 acres were cultivated. By far the greatest growth of this business in Georgia was between 1880 and 1890.

SEED FARMS.

In early times families saved the seed from their annual productions, in most cases from whatever remained over from the farm. In some cases careful selection was made, and purer and better seeds obtained, which not only furnished the home supply, but were willingly given to friends and neighbors, who, in return, supplied any seed of their own that might be considered of superior quality. This same practice continues in many communities. The general growth of the country, the rapid increase of population in cities and towns, which led to the establishment of market gardens, the demand for choice seeds and the difficulty of procuring them led the market gardeners or truck farmers to grow and save them, at first for their own use, and later to supply the increasing demand, until finally some of them drifted into the production and sale of seed as a distinct business. The first regular seed farm in the United States, of which there is any report, was established in connection with the nursery business in Philadelphia in 1787. This branch of horticulture was not made a subject of census inquiry until 1890. Of the 596 seed farms in the United States reported at that time, 258, or nearly one-half, were in the North Atlantic Division, the original center of seed production. In the South Atlantic Division there were 89 seed farms, of which 31 were in Georgia and 46 in Florida. The 31 seed farms of Georgia embraced 2,627 acres with a total valuation for farms, implements and buildings of \$177,000, while the 46 seed farms of Florida embraced only 760 acres, with a total valuation for farms, implements and buildings of \$62,333. Of those in Georgia which reported date of

establishment, twenty-two were established between 1880 and 1890. Of those in the North Atlantic Division 13 dated back to the decade between 1830 and 1840, and five to even an earlier period. The first one reported in Georgia was in the decade between 1870 and 1880. So as far as our State is concerned, it is a decidedly new industry, which, between 1880 and 1890, showed a very rapid growth. It is believed that the census report of 1900 will show a large increase in the number of seed farms in Georgia.

The census report for 1890 said: "While this report shows the extent and production of the seed farms proper, the total amount of garden seed produced in the United States is considerably in excess of the amount here given. . . . Again, while the greater amount of seed grains, cotton and tobacco used upon farms is of home production and is freely exchanged for labor or for other products, there are in nearly every county successful farmers who, by a careful selection of seed stock and by better methods, secure greater returns than their neighbors, and are able to dispose of part of their production for seed purposes at advanced rates. These men cannot be classed as seed farmers, and would hardly be able to estimate what proportion of their crops is sold for seed purposes annually; but it is safe to assume that such farmers produce one-third of all the small grains, corn, potatoes, tobacco and cotton seed planted."

IRRIGATION.

One of the most pressing needs of Georgia is irrigation, both surface and underground. How many a time have the agricultural interests of our State suffered from a drought, that has blasted the brightest prospects of a once promising crop! How many a time has the farmer's heart throbbed with anxiety as the sun scorched his fields, while he longed for a favorable season and sighed for the rain that would not come! Irrigation is not only a preventive of drought, but enables the farmer to control the supply of water and to furnish it to the plant at the right time and in the right quantity. This question concerns also the drainage of the land and the preservation of the forests.

In the vast arid stretches which are found in the States west of the Mississippi river, and where farming without irrigation is impossible, men learn the business thoroughly. But this is intensive farming, a method in which success can be attained only by thorough tilling and careful attention to details. Although one man cannot look after so much land as under the old method, yet he soon learns that he can make

larger profits by carefully tilling a small area than by diffusing his efforts over a larger one. Where a small measure of success can be attained by the careless tillage of many acres of moderate fertility, farmers are apt to go on in the old way, trusting to the weather, getting a good crop if the seasons are favorable, and in a year of drouth, hoping that the next one will be better. Then, if disappointed again, they wonder why Providence is so unkind, forgetting that they have at their command an agent that will enable them to overcome the ills of which they complain. In some sections of Texas where the rainfall is inadequate, it is customary on irrigated fields to make at least a bale of cotton to the acre, while the average on unirrigated lands of the same soil is hardly more than one-fourth of a bale to the acre. A large part of Idaho is so deficient in rainfall, that the country looks like an arid waste. But right in the midst of a desert, that appears to be fit for nothing, and looks as though it can never be made to produce anything, the traveler will come to an orchard of apples, prunes or peaches, each limb loaded almost to breaking with luscious fruit. Perhaps only three years ago this noble orchard was part of the all-surrounding sage-brush desert. What wrought the wondrous change? Irrigation, a scientific expedient, of which for three thousand years man's skill has made use to overcome the unequal distribution of nature's gifts. Some mountain stream near the foothills has been dammed, a great reservoir built, and a huge ditch, carrying millions of feet of water, has been led across the country and its water distributed at the points where needed. The difficulties in the way of successful irrigation are nothing like so great in Georgia. From our numerous creeks and rivers, by proper machinery, the water can be conveyed and distributed wherever needed. Sometimes artesian wells can be used for this purpose, irrigating the land through a system of ditches or storage tanks. Windmills can also be used for pumping up water from wells and distributing it over a garden or field.

TERRACING.

The fertility of broken or rolling lands is greatly enhanced by strict attention to levels or horizontals in their cultivation. As the population of the State increases, the old system of large plantations, which exhausted lands could be turned out to rest, and new ones of soil yet virgin brought under cultivation, becomes more and more impracticable. Smaller farms become a necessity, as more people come in to take up the land, and the importance of devising plans, by which the fertility of all lands may be preserved, becomes yearly more apparent.



ONION FIELD.

Especially in river bottoms the exhausting process takes from the absorbing capacity of the land and renders it more liable to overflow. Instructed by repeated disasters in the bottom lands, and in those of the Savannah river in particular, by which for three consecutive years the farmers of Georgia were sent West for their corn, a few pioneers began as far back as 1885 to put their land under a more or less perfect system of level cultivation, and four years later the terrace reform began in earnest all over Middle Georgia. As to proper methods of terracing, complete instructions, which meet all cases, cannot be given. To one who has never tried it, but who wishes to adopt this system, a visit to some well-terraced farm, with its unbroken horizontal lines well sodded in grass for the purpose of conserving the rainfall, would be an object-lesson easily comprehended and worth more practically than the study, or blind following of instructions that can be only general in their nature. If breaks occur in any of the terraces, a good practical farmer who watches his fields and soon discovers whatever may be needed, can take his hands to the spot and with an hour or two's work, repair the damage. On land properly terraced, after a heavy rainfall, each water furrow is covered with a fine impalpable powder similar to the rich alluvial deposits found on bottom lands from back water.

Commercial fertilizers are soluble and as a rule are put in near the surface. Hence they are made more effective by being protected from washing and leaching rainfalls; and such is the case on land properly terraced.

There are in every country solid, substantial and successful farmers, some of whom living on their ancestral domains, soon after the close of the great civil war adjusted themselves to the new order of things, and studying carefully the changed conditions and their requirements, went diligently to work, and by intelligence, thrift and enterprise won back fortunes that had been lost in the clash of arms. Others beginning with scanty means, by careful cultivation of small farms, using the most approved methods, have, by the fruits of their industry, purchased the worn-out lands of their neighbors, and under the best system of intensified farming, have brought them back to life and fertility. These are the men who set the pace for others less enterprising, and may be counted on for irrigation, terracing and any other advanced movement calculated to promote the agricultural progress of Georgia.

CHAPTER XI.

FISH AND GAME.

In almost every county of Georgia are streams whose waters abound in many kinds of fish. Its rivers, creeks, lagoons and ponds give yearly contributions from the finny tribes to reward the labors of the professional fisherman with net or seine, or to repay the patience of the youthful anglers who with rod and line, go forth on holidays to ensnare with worm or fly the unsuspecting fish. In the mountain streams sport the speckled trout. On the Savannah, the Ogeechee and the Altamaha, shad are caught and sold in the markets of Augusta, Savannah and Brunswick. The little town of Darien, near the mouth of the Altamaha, carries on a considerable trade in shad. On the sounds and inlets that flow between the mainland and the numerous islands that fringe the Georgia coast the fishermen's boats are continually busy gathering for the home market or for shipment several varieties of salt fish, besides oysters, shrimps, crabs and lobsters. In the waters of Okefinokee Swamp abound black bass, bream, perch and many other varieties.

In commercial fisheries Georgia did not rank high in the census of 1890, simply because the products of the fisheries had been almost entirely consumed in supplying the home demand. By the census of 1890 the inland fisheries of Georgia were reported as employing 69 persons with a total investment of \$7,859 for boats and minor apparatus. The annual products were 93,480 pounds of fish, valued at \$7,829. All these figures were considerably below the reality. The fisheries along the coast are classified in the United States census under the head of the "Atlantic and Gulf Boat Fishery," and embrace the fishing along the coast in boats. It is so called to distinguish it from that at sea, requiring vessels large enough for registry, that is of five tons burden, or more. The fish are generally sold at once to consumers with only enough of care and labor to insure their delivery. A large proportion of the fishermen are negroes, who equip themselves in the most inexpensive manner, their boats being often so simply made as to have a merely nominal value. The census report declares that "there is such irregularity in their employment, that the return of the number thus engaged is es-



BLACK BASS.

By Permission.

From a painting by Hal Morrison of Atlanta, Ga.

pecially unsatisfactory. Of the "Atlantic Boat Fishery," reports were made of only ten of the States leading in this industry. Georgia was not one of these.

Since 1893 there has been an immense increase in the fishery business on the Georgia coast.

From 1888 to 1891 several oyster canneries were started, but all failed from lack of experience. In the winter of 1893 and 1894 Mr. August Oemler reopened his canning establishment on Wilmington island. His business has steadily grown, and for each of the last two winters his cannery has packed 1,400,000 cans. His establishment employs 24 sailing crafts of from eight to thirty-two tons burden, also three tugs with seven barges, besides numerous small crafts of from thirty to one hundred bushels capacity. There are three other canneries in operation in the vicinity of Savannah. These are: Vam & Byrd, Thunderbolt; George W. Lowden, Thunderbolt; Rosedue Cannery Co., Coffee Bluff. These three establishments put up during the winter of 1899-1900, 1,150,000 cans. Between, 1,500 and 2,000 persons in Chatham county are engaged in this trade, which amounts to many thousand dollars annually.

Brunswick, in Glynn county, favorably located on Oglethorpe Bay, and in importance the second seaport of Georgia, enjoys a fine reputation for oysters. Those shipped from that market are considered of superior quality. One canning company puts up for a New York wholesale house a special brand which is said to bring the highest price of any oyster on the market. There are in the vicinity of Brunswick not less than 50,000 acres of natural beds, of which 25,000 have been taken up and cultivated to some extent. These yield a large and fine oyster.

There are fine oyster-beds also contiguous to Darien and St Mary's.

Considerable interest has already been awakened throughout the United States in regard to fish culture in private ponds. This culture is attended with slight labor and expense. Almost every farm has some stream or pond, that could be so utilized, or at least land of a swampy nature, that could be made valuable by being transformed into a fish-pond. In this country fish culture has until late years received comparatively little attention. The artificial propagation of fish among the civilized nations of the earth is a new science. Yet it has been long practiced by some of the heathen nations, especially by China and Japan, who, for thousands of years, have sustained, to a large extent, their dense populations upon fish, a large proportion of which was artificially propagated. To France belongs the honor of originating fish culture in the manner now practiced among civilized nations. With such marked results were their efforts attended, that other European nations promptly followed their example.

On many Georgia farms the carp pond has been introduced as one of the features. It would be well to introduce ponds stocked with these or other kinds of fish, wherever nature has not already supplied them.

There are many varieties of fish in the United States. It would be well to stock our Georgia ponds and streams with them, wherever for any cause the supply is running short.

We append the report of the Fish Commissioner for 1900.

REPORT OF FISH COMMISSIONER.

Hon. O. B. Stevens, Commissioner of Agriculture for Georgia:

Sir:—In conformity to your request, I have the honor to submit my annual report as Superintendent of Fisheries for the State of Georgia, for the fiscal year ending September 30, 1900.

During the period covered by this report there has been a marked improvement in the observance of the laws pertaining to fish throughout the State. The distribution of the booklet, "Georgia Fish Laws," over the State and the work of the Fish Wardens, has resulted in the accomplishment to a large measure of the end desired. During this year the violations of these laws have been less than any former year. This is especially noticeable in the inland counties. The number of fish has noticeably increased. The abundance has been remarked on by citizens throughout the State. More fish have been used and sold, both on the coast and inland, than for years past.

The following statistics taken from the latest authority are given to show the amount involved and interested in the fisheries:

"In 1897, 1,869 persons were engaged in the fisheries of Georgia—159 in the vessel fisheries, 1,245 boat fishermen, and 465 shoresmen. The investment in the fisheries amounted to \$284,864. Fifty-one vessels were employed, worth, with their outfit, \$28,833, and 680 boats, valued at \$20,277. The apparatus of capture was valued at \$17,898, while the shore property and cash capital amounted to \$217,856.

"The yield of the fisheries of this State was 4,995,100 pounds, worth \$170,605. The most important items in the fisheries of Georgia are oysters, the yield being valued at \$86,709, and shad, the value of which was \$46,705. The catch of terrapin was valued at \$11,254, and sturgeon at \$4,060. The value of products, when compared with that of 1890, shows an increase of \$47,042."

The Superintendent wishes especially to commend the work done by the Fish Wardens throughout the State. They have shown interest and activity, and have succeeded very effectually in enforcing the laws. The compensation provided for these Wardens by the Code is "one-half of the fines and forfeitures imposed by the court and paid by the violators." Under the construction which has been placed on these words, when they have been construed, the Wardens get nothing when the defendant is sent to the chain-gang in default of paying his fine. This works a manifest injustice. I would recommend that these Wardens be paid the same



THE GEORGIA PARTRIDGE. *By Permission.*
From a painting by Hal Morrison, of Atlanta, Ga.

proportion of the amount realized from the hiring out of a defendant to a chain-gang, where he does not pay the fine, as is given the Warden when the fine is paid. The labor performed by these men in securing the conviction of criminals and the enforcing of the laws makes this just. And the provision should be the same, whether the money comes directly from the payment of the fine or from the hiring out of the defendant.

During this year I have distributed over the State more than one thousand copies of the Georgia Fish Laws. The good which has already resulted from the publishing of this booklet is great and will continue. In many counties the wardens have reported to me that, with the distribution of these laws, violations have practically ceased. An addendum has been prepared giving the public and local laws enacted by the last legislature. I will be glad to furnish upon request either this addendum or the Fish Laws of those wishing. The large demand already made for copies evidences the interest in and appreciation of the publication.

Although no systematic effort has been made to investigate the various streams and lakes stocked with new varieties of fish, this office is in constant receipt of information showing the result of their introduction. The United States has established a fish cultural station at Cold Springs, Bullochville, Ga., and there some of the fishes most suitable to the warm waters of the South Atlantic and Gulf States will be propagated. The results of this, I believe, will be most gratifying.

The expenses of this department from October 1st, 1899, to October 1st, 1900, have been \$56.34, as shown by the attached itemized statement.

(See Exhibit A.)

Very Respectfully,

A. T. DALLIS,
Superintendent of Fisheries, State of Georgia.

GAME.

Game also abounds in almost every part of Georgia. In the mountains and valleys, in fields or wood, lagoon or swamp, or mid the extensive stretches of pine forests are found many kind of birds, the squirrel, hare and opossum. In the proper season the echoes resound with the report of the shotgun, the favorite weapon of those who seek the quail (or partridge), the dove and field lark, or the rice bird of the swamps and marshes.

In favored sections are found the snipe and woodcock, while in others the wild turkey, a nobler game, falls a victim to the hunter's shotgun or rifle. In Northern Georgia or in the woods of the southern portion of the State, stalk the stately deer, which are especially numerous among the islands of Okefinokee Swamp, where also dwell the bear, otter, wild-cat and panther. To the sportsman who does not object to hunting in water and muck, or to carrying his food and blankets on his back, Okefinokee is a paradise of delights. But to him who prefers to hunt amid

pleasanter surroundings, some of the older localities give ample scope for the enjoyment of his favorite pastime.

In Chatham county, which was settled 168 years ago, the deer yet roam the woods, and almost any winter day one can be started on the edge of the Ogeechee swamps. A dozen or more of Savannah's hunters each winter make a specialty of deer-shooting. Every now and then they return from a hunt with a big buck or a fat doe strapped to their buggies. For many generations have men been shooting them, and yet there are many survivors who continue to afford the hunter "lots and loads of fun."

Near Savannah regular hunters follow the dog for quail, or trail up the creeks for duck, or on the islands of the river and along the edges of the rice fields, bring down with unerring aim doves and partridges, snipe and woodcock. In one of the large game preserves below Savannah pheasants have been colonized.

Jekyl, one of the loveliest of Georgia's beautiful sea islands, belongs to a club which has stocked its woods with game and has the exclusive right to hunt on the island or fish in its waters. The owners of this island enjoy beautiful scenery, ocean beaches and charming forest drives.

CHAPTER XII.

MANUFACTURES.

Georgia stands in the front rank of the Southern States in the variety, extent and value of her manufacturing establishments, without considering the question of her leadership in any one particular line. Long before the civil war the prominence of the State in railroad construction and manufactures gained for her the proud title which she still worthily bears, "Empire State of the South." Some of her leading manufacturing enterprises began far back in the thirties and steadily grew in extent and variety. Many of the small industries, such as shops for making brooms, buckets and boxes, were early introduced. The larger ones, such as cotton and woolen factories, iron works, tanneries, saw, flour and grist mills, lumber and planing-mills for making doors, blinds, sashes and almost all descriptions of carpentry, were found in many localities, especially in or near the larger towns. Although agriculture was the leading pursuit, many enterprising men were engaged in manufactures and their number was steadily increasing. Georgia was no laggard in the march of progress, suddenly aroused from long slumber by the rude shock of arms, and taught in the school of adversity to turn her attention to other industries besides those of planting. The thoughts of her wide-awake business men had long been turned to manufactures and commerce, as important collaborators with agriculture in the development of their beloved State, and many of the most influential men of Georgia, some of them planters of large means, were stockholders and directors of cotton and woolen factories, flour, grist and saw-mills. The rattle of looms and whir of spindles were heard in our growing cities and towns. Manufacturing villages sprang up near good water-powers, in solitudes that had never yet been pierced by the whistle of the locomotive. The same spirit, which is making Georgia great to-day, was abroad in the land then. The rapid growth of our cities had already commenced. We see the evidence of this in White's "Historical Collections of Georgia," published in 1854, where we find the following reference to what is now our greatest city: "Atlanta has had a growth unexampled in the history of the South. It is the point at which the Western and Atlantic, the Macon and Western and the Georgia railroads connect." Then Mr. White gives a state-

ment from Jonathan Norcross, Esq., a few extracts from which are here given: "Population of Atlanta not precisely known, but placed by none under 4,500 and still increasing. . . . There is in this city one steam flouring-mill, investment \$35,000, the operation of which may be placed at \$150,000 per annum. One iron foundry and machine shop—cash operations \$20,000 per annum. There are three carriage and wheelwright shops, two large tanneries, one large shoemaking establishment, two large tanneries and shoe-establishments in course of construction. In addition to the Georgia Railroad and State machine shops, which employ large numbers of workmen, one car-shop is now going up as a private enterprise—investment \$30,000."

Mr. White then goes on to enumerate "the Winship establishment for making railroad cars, with a capital of \$20,000; the Atlanta Tanning company—proprietors, Alexander and Orme, with a capital of \$20,000—hides handled by machinery, propelled by steam—connected with which establishment were a grist-mill and patent circular saw-mill, lathe and shingle machine; the Atlanta Machine Company turning out \$12,000 worth of work per annum."

The railroads and manufactures which were then laying the foundations of a great city in what a few years before was a wilderness, were the fruits of Georgia enterprise. The same agencies were at that very time putting new life into the older cities, Augusta, Macon, Columbus and Athens. It may be news to some that the period of Atlanta's most wonderful development and most rapid growth was between 1850 and 1860. The child of railroads and manufactures, she grew at a tremendous pace, which no subsequent decade of her history has paralleled, and was an important factor, as she is still, in winning for Georgia a reputation for energy, pluck and enterprise.

In the whole State there were in 1850 1,522 manufacturing establishments, of which 35 were cotton-mills, several of these being also engaged in the production of woolen fabrics for the sole manufacture of which there were three mills. The other establishments were divided among the various manufactures which minister to the needs of every civilized community. The total value of the products of all manufactories was \$7,082,075. The total number of establishments at each succeeding decade is: in 1860, 1,890; in 1870, 3,836; in 1880, 3,593; in 1890, 4,283.

The total value of their products has shown a steady increase, being for 1860, \$16,925,564; for 1870, \$31,196,115; for 1880, \$36,440,948; for 1890, \$68,917,020. In 1880 the 24,875 laborers employed received \$5,266,152 in wages; in 1890 the 56,383 laborers were paid \$17,312,126.



HON. MARK A. COOPER,

A Pioneer in Georgia Manufacturing Enterprises and First President of the Georgia Agricultural Society, the influence of which organization was largely instrumental in the establishment of the State Department of Agriculture.

The material consumed was valued as follows: \$24,143,939 in 1880; \$35,774,480 in 1890.

If the ratio of increase between 1890 and 1900 was as great as that between 1880 and 1890, we would have for the number of all manufacturing establishments in 1900, 5,113; the total value of their products, \$139,509,926; the number of laborers, 187,000; their wages, \$58,861,228; and the value of the material consumed, \$51,552,000.

If the official figures for 1900 can be obtained in time, they will appear in the Appendix; if not, they will be published later.

The growth in the textile industries of the whole Union during the last ten years is remarkable; but the most wonderful part of it is the progress of the South in cotton manufacturing.

According to figures collected by the Boston *Textile World*, the North had, in 1890, 12,721,341 spindles and the South 1,828,982. Now the North has 15,242,554 spindles, while the South has 5,815,429. The increase in the South for the last decade is therefore 217 per cent. and for the North 19.8 per cent. South Carolina comes third in the Union, right after Massachusetts and Rhode Island, with 1,794,657 spindles. North Carolina is fourth with 1,429,540 spindles; New Hampshire fifth with 1,343,923 and Georgia sixth with 1,218,504. Of the Southern States Georgia ranks as third in number of spindles.

Cotton Mills.—In 1827 Augustin S. Clayton, Thomas Moore, Asbury Hull, James Johnson and W. A. Carr, began the erection of the first cotton-mill south of the Potomac, which was also among the first in the United States. In 1833 John White became superintendent of what was then called the Georgia Factory, and to-day his descendants own this mill, known as White's Factory.

By 1852 two mills, which long outranked all others in the State in size and product, had been constructed. One was the Augusta Cotton Factory at Augusta, the other, the Eagle Mills of Columbus. The former of these was first operated in 1847 and was located on the Augusta Canal, which being completed the same year and greatly enlarged in 1875, gives to that city a magnificent water-power, and affords splendid sites for factories and mills, of which the citizens of Augusta have not been slow to avail themselves. For on the banks of the canal there are now seven other factories. Yet not more than one half of the water-power of the canal has been taken up. The Eagle Mills (now known as the Eagle and Phoenix, with more than double their original capacity), built in 1851, were first operated in 1852, and have always manufactured both cotton and woolen goods. Many mills for the manufacture of both these fabrics were built at many points in the State where good water-

powers were available. The cotton and woolen mills at Roswell, on the Chattahoochee in Cobb county, were famous in the early fifties, their goods being held in high esteem and finding a ready sale in Tennessee, Alabama and Georgia. During the civil war the Roswell factory supplied good woolen cloth for suits for gentlemen and ladies.

In good locations with no available water-power, steam cotton-mills were erected, which paid good dividends to their stockholders. These facts, with the additional knowledge that factories of many kinds were in operation in Georgia, with their number and variety rapidly increasing between 1850 and 1860, show conclusively that those are greatly in error who imagine that Georgia's manufacturing enterprise is of post-bellum birth. The four years' conflict of arms between the North and South checked somewhat, though not entirely, enterprises of this kind. In the wake of Sherman's army the mills at Roswell, Madison and Eatonton were committed to the flames, as was nearly every other mill of any kind along its desolating march. And yet in 1870, or five years after the close of hostilities, Georgia had 34 cotton-mills in operation, one more than in 1860, and 85,602 spindles, or 416 more than in 1860. By 1880 the number of cotton-mills in Georgia had increased to 40, with 198,656 spindles, and by 1890 to 53, with 445,452 spindles. The capital invested in 1880 was \$6,348,657, with a product valued at \$6,481,894. In 1890 the capital had increased to \$17,664,675 and the product to \$12,635,629. In 1880 the Georgia mills consumed 71,389 bales of cotton, and in 1890, 145,869. In 1880 the average number of employees was 6,215, who received in wages \$1,135,185, while in 1890 10,530 employees received \$2,366,086. By 1896 the total amount invested in Georgia in the manufacture of cotton textiles exceeded \$25,000,000. In 1889 there were in the United States 74 machines for printing cloth, of which 44 were in Massachusetts. Only three were located in the South and they were in Georgia. In the manufacture of higher grade cotton goods, Georgia stood in the front of the States of the South, being the only one of them that furnished any bleached yarns.

Georgia and South Carolina were the only Southern States at that time bleaching cloth. The total amount bleached was in South Carolina, 2,438,468 square yards, and in Georgia 7,593,950 square yards. Another fact to be noted is that, while North Carolina had 91 mills in 1890 and Georgia 53, the value of the product of North Carolina's mills was \$9,563,443, of the Georgia mills \$12,635,629, and of the South Carolina mills \$9,800,798.

According to a report on "Cotton Movement and Fluctuations," by Latham, Alexander & Co., bankers and commission merchants of New York, in which they cover the period from 1894 to 1899, Georgia had

for the season of 1898-9 a total of 67 cotton-mills, with 696,394 spindles. These mills consumed 280,177 bales weighing 129,140,837 pounds. The report says

"Southern cotton-mills have likewise enjoyed a more prosperous season than the previous one, especially since the first of January. They were in better condition than Northern spinners even during the last quarter of 1898. But since 1899 began, their use of the raw material has appreciably increased and the margin of profit has been wider. These changes are the natural result of the more active consumption of goods. In very many instances Southern mills have found it necessary to keep in operation night as well as day to prevent a too rapid accumulation of orders. There is as yet no sign of a check in this development. On the contrary, it is the general opinion among Southern manufacturers with whom we have been in correspondence, that the future outlook is extremely bright."

For the year from September 1, 1899, to September 1, 1900, the growth of the cotton industry in Georgia was beyond all precedent. Many new mills were put in operation and many others were in process of construction on September 1, 1900. By January 1, 1900, there were in operation in Georgia 75 mills with 913,346 spindles, and 21,903 looms. The value of these factories was \$15,614,000. By September 1, 1900, there had been completed 12 new factories and 24 others were approaching completion.

The following factories were in operation on January 1, 1900:

LOCATION AND NAME OF COMPANY.	Equipment Jan. 1, 1900.		Capitalization.
	Looms.	Spindles.	
Alice—Harmony Mills.....	.....	800	*\$ 25,000
Aragon—Aragon Mills.....	450	20000	200,000
Athens—Athens Manufacturing Company.....	350	10000	125,000
Athens—Georgia Manufacturing Company.....	.....	11648	* 250,000
Athens—Mattison Braided Cord Company.....	5	2000	40,000
Athens—Princeton Manufacturing Company.....	100	4000	100,000
Athens—Star Thread Company.....	.....	6000	150,000
Atlanta—Annestown Cotton Mills.....	6	2300	* 50,000
Atlanta—Atlanta Cotton Mills.....	540	18000	300,000
Atlanta—Exposition Cotton Mills.....	1433	46000	500,000
Atlanta—Fulton Bag and Cotton Mills.....	1200	45000	250,000
Atlanta—Whittier Mills (Ohattahoochee).....	.....	10000	150,000
Augusta—Augusta Factory.....	1000	35000	600,000
Augusta—Enterprise Manufacturing Company.....	928	33000	750,000
Augusta—Globe Cotton Mills.....	114	1728	25,000
Augusta—Isaetta Mills.....	150	4100	25,000
Augusta—J. P. King Manufacturing Company.....	1812	60288	1,000,000
Augusta—Sibley Manufacturing Company.....	1409	48200	900,000
Augusta—Sutherland Mills.....	.....	8800	85,000
Augusta—Warwick Cotton Mills.....	224	4100	25,000
Banning—Hutcheson Manufacturing Company.....	.....	5000	* 90,000
Barnesville—Barnesville Manufacturing Company.....	.....	12416	* 120,000
Beverly—Pearl Cotton Mills.....	.....	7500	* 40,000

LOCATION AND NAME OF COMPANY.	Equipment Jan. 1, 1900.		Capitalization.
	Looms.	Spindles.	
Cedartown—Cedartown Cotton Company .....	....	2360 ⁰	\$ 350,000
Columbus—Clegg Manufacturing Company	116	....	36,000
Columbus—Eagle and Phenix Mills	1754	4715 ²	750,000
Columbus—Hamburg Cotton Mills	210	600 ⁰	100,000
Columbus—Muscogee Manufacturing Company	450	1800 ⁰	157,500
Columbus—Swift Manufacturing Company	423	1800 ⁰	250,000
Cornelia—Porter Manufacturing Company	80	600 ⁰	* 125,000
Commonwealth—Christian Commonwealth	5	....	2,500
Covington—Porterdale Mills	80	600 ⁰	* 100,000
Dalton—Crown Cotton Mills	350	1000 ⁰	* 180,000
DeBruce—Phoenix Factory .....	....	510 ⁰	100,000
Dennard—Houston Factory	60	224 ⁰	* 60,000
Elberton—Swift's Cotton Mill	174	704 ⁰	* 100,000
Forsyth—Forsyth Manufacturing Company .....	....	600 ⁰	* 50,000
Gainesville—Georgia Manufacturing Company .....	....	330 ⁰	* 50,000
Griffin—Griffin Manufacturing Company	593	1500 ⁰	* 400,000
Griffin—Kincaid Mill	430	1255 ²	* 320,000
Griffin—Spalding Cotton Mills	236	900 ⁰	200,000
Griffin—Rushton Mills	150	5000	100,000
Harmony Grove—Harmony Grove Mills	156	416 ⁰	* 100,000
Hartwell—Witham Cotton Mills	102	80 ⁰	* 40,000
High Shoals—High Shoals Manufacturing Company	150	5000	* 150,000
Jackson—Pepperton Cotton Mills	160	540 ⁰	180,000
Jewell's—Jewell Cotton Mills	121	400 ⁰	75,000
Lafayette—Union Cotton Mills	212	678 ⁰	100,000
LaGrange—Dixie Cotton Mills	354	2000 ⁰	350,000
LaGrange—LaGrange Mills	75	1000 ⁰	157,400
LaGrange—Park Mills	25	160 ⁰	25,000
Lindale—Massachusetts Mills in Georgia	1726	51264	1,000,000
Macon—Bibb Manufacturing Company .....	....	2500 ⁰	1,417,000
Macon—Manchester Manufacturing Company .....	....	1000 ⁰	100,000
Macon—Payne Cotton Mills .....	....	3328	* 50,000
Macon—Willingham Cotton Mills .....	....	7500	100,000
Monroe—Monroe Cotton Mills	534	520 ⁰	* 100,000
Newnan—Newnan Cotton Mills .....	....	1000 ⁰	* 70,000
Palmetto—Palmetto Cotton Mills	87	600 ⁰	50,000
Pottersville—Taylor Manufacturing Company .....	....	2300	75,000
Raccoon Mills—Raccoon Manufacturing Company	104	3400	164,700
Rome—Rome Cotton Factory	108	5186	* 98,500
Roswell—Laurell Mills Manufacturing Company	67	....	* 55,500
Roswell—Roswell Manufacturing Company	120	12600	262,000
Sargent—Wahoo Manufacturing Company .....	....	3000	48,000
Savannah—Savannah Cotton Mills .....	....	7736	150,000
Shoal Creek—Shoal Creek Mills .....	....	2200	30,000
Toccoa—Toccoa Cotton Mills	160	5000	* 61,000
Trion Factory—Trion Manufacturing Company	1422	49936	* 600,000
Union Point—Union Point Manufacturing Company .....	....	400	* 50,000
Waleska—Little River Mills .....	....	640	* 10,000
Waymanville—Wayman Cotton Mills	76	3408	63,000
West Point—Lanett Cotton Mills	1500	58000	500,000
Whitehall—Georgia Manufacturing Company .....	....	12000	* 120,000
Whitehall—Whitehall Yarn Mills .....	....	2500	* 75,000
Totals (47 towns, 75 mills)	22,289	927346	\$15,914,000

* All Georgia capital.

The following new mills were completed or approaching completion on September 1, 1900:



SCENE ON THE ALGUSTA CANAL.

LOCATION AND NAME OF COMPANY.	Equipment.		Capital Stock.	GOODS TO BE MFG.	Annual Consumption Cotton.	PROGRESS OF WORK.
	Looms.	Spindles.				
Lawrenceville—Lawrenceville Cotton Mills	175	4,000	\$60,000	Average 26 yams.	2,500	Foundation and first floor.
Thomaston—Thomaston Cotton Mills		6,800	100,000	4 yd. sheeting, drills.	8,600	Completed; start October 1st.
Millen—Millen Cotton Mills		5,000	80,000	Average 40 yams.	8,100	To second story.
Tifton—Tifton Cotton Mills		5,000	80,000	Average 40 yams.	3,100	Up to first floor.
Tennille—Tennille Cotton Mills		4,000	60,000	Average 26 yams.	2,500	Halls and two floors.
Jefferson—Jefferson Cotton Mills		3,000	80,000	4 yd. sheeting.	1,800	Complete; start September 1st.
Toccoa—**Oapps Cotton Mills		5,000	50,000	Average — yams.	30,000	Building completed.
Gainesville—Pacolet Mfg. Co. of S. O.		50,000	1,000,000	Standard sheetings.	30,000	First floor laid.
Greensboro—Mary-Lelia Cotton Mills	160	5,000	100,000	4 yd. plain sheetings	8,000	Completed.
Columbus—Bibb Mfg. Co. of Macon	800	20,000	300,000	Mercerizing yams.	12,000	Completed.
Hogansville—**Hogansville Mfg. Co.	160	3,000	80,000	Heavy duck.	8,000	Running.
Juliette—**Juliette Mfg. Co.		3,000	70,000	Coarse yams.	1,200	Running.
O Carrollton—Mandeville Cotton Mills	200	6,000	100,000	Fine yams, sheeting.	3,500	Completed and running.
Pelham—**Pelham Mfg. Co.	160	5,000	100,000	Brown sheetings	3,000	Buildings completed, start Oct. 1st.
Valdosta—Strickland Cotton Mills	325	10,000	176,000	4 yd. sheetings	6,200	Completed; start September 1st.
Cedartown—Standard Cotton Mills		10,000	100,000	Ex. corded Hos. yms.	6,000	Completed.
Canton—Canton Cotton Mills	160	5,000	100,000	4 yd. sheetings	8,000	Foundations laid.
Hawkinsville—**Hawkinsville Coot. Mills.		3,000	50,000	8s to 24s yams	3,000	Building to first floor.
Atlanta—Elizabeth Cotton Mills	296	10,000	100,000	Hosiery yams.	2,500	Roofing building.
Atlanta—Piedmont Mfg. Co.		5,000	160,000	Hosiery yams.	3,000	Building completed.
Atlanta—Scottdale Mills	350	10,000	250,000	Sheetings	6,500	Building completed.
Atlanta—**Gate City Cotton Mills	160	5,000	100,000	4 yd. sheetings	3,000	Up to first floor.
Dallas—Paulding Cotton Mills	70	3,500	75,000	Sheetings	3,000	Building completed.
Quitman—Atlantic and Gulf Mills		4,500	75,000	Yarns	2,500	Running day and night.
Moultrie—**Moultrie Cotton Mills	160	5,000	100,000	4 yd. sheetings	3,200	Building to second story.
Dublin—Dublin Cotton Mills	640	5,000	100,000	Sheetings	3,000	Foundations going up.
Columbus—Columbus Mfg. Co.		25,000	350,000	Sheetings	15,000	Building completed.
Thomson—**John E. Smith Coot. Mfg. Co.		2,500	60,000	16s to 32s hosiery yms	1,300	Running.
Eatonton—**Eatonton Electric Co.	100	2,000	60,000	4 yd. sheeting.	1,000	Running.
Eatonton—Middle Georgia Cotton Mills		5,000	100,000	Yarns	6,500	Foundations laid.
Covington—**Covington Mills	320	5,000	100,000	Sheetings	6,000	First floor timbers laid.
Monroe—Walton Cotton Mills	160	5,000	100,000	Sheetings	8,000	First floor timbers laid.
Winder—Winder Cotton Mills		5,000	100,000	Yarns	3,000	Laying foundations.
Newnan—Newnan Cotton Mills No. 2		8,000	150,000	28s to 40s for mer.	4,000	Laying foundations.
Cochran—**Cochran Cotton Mills		3,500	60,000	Yarns	2,700	Building and operatives cottages.
Hampton—**Hampton Cotton Mills		2,500	50,000	Hosiery yams.	2,000	Up to the roof.
Totals (Towns, 32; Mills, 36)	4,358	65,140	\$4,775,000	Average coarse	191,600	

* All Georgia capital. ** Drawn to double capacity.

SUMMARY.

Mills in operation January 1, 1900.....	75
Mills built 1899-1900.....	36
Total mills	111
Value of factories in operation	\$15,914,000
Value of factories building	4,775,000
Total value of factories.....	\$20,689,000
Spindles in operation January 1, 1900	927,346
Spindles installed in new mills.....	265,140
Total number of spindles	1,192,486
Looms in operation January 1, 1900	22,289
Looms installed in new mills	4,356
Total number of looms	26,645
Cities and towns with mills January 1, 1900.....	47
Cities and towns with new mills	36
Total of cities and towns with mills.....	83
Capital of organized and proposed mills.....	\$ 1,757,000

The Division of Statistics of the United States Department of Agriculture, after a more thorough and searching investigation than ever before in regard to the growth of cotton spinning in the South, published in 1901 the following table prepared by Mr. John Hyde:

PROGRESS OF COTTON SPINNING IN THE COTTON STATES.

States.	Number of Spindles.		No. of Mills in Operation.				New Mills, 1900.		
	1890	1900	1890	1897-1898	1898-1899	1899-1900	Completed, etc.	Projected.	Total.
Alabama	79,234	437,200	13	87	88	44	5	5	10
Arkansas	α 66,980	17,160	1	2	3	4	1		1
Louisiana		62,222	2	8	3	5	8		3
Missouri		15,744	1	8	3	4			
Texas		60,876	1	4	5	6	8	3	6
Georgia	445,452	969,884	53	77	79	86	23	13	41
Kansas		2,000				1			
Kentucky	42,942	68,730	5	11	11	10			
Mississippi	57,004	88,584	9	7	7	10	7	2	9
North Carolina	337,786	1,264,509	91	161	169	190	28	6	34
South Carolina	332,784	1,693,649	34	76	80	93	25	2	27
Tennessee	97,524	155,997	20	29	29	32	5	8	8
Virginia	94,294	165,452	9	15	17	15			
Total.....	1,554,000	5,001,487	239	425	444	500	105	34	139

α Total for Arkansas, Louisiana, Missouri and Texas; details for each State not given in census report of 1890.

The increase in the number of mills in each State from 1899 to 1900 is: Alabama 6, Arkansas 1, Georgia 7, Kansas 1, Louisiana 2, Mississippi 3, Missouri 1, North Carolina 21, South Carolina 13, Tennessee 3, and Texas 1; total, 59. The records of the Department show, as is seen by the above table, 105 new mills completed in 1900, of which number Georgia is credited with 28. The report of the Division of Statistics says moreover: "Thirty-four additional mills are projected, that is, companies have actually been organized and are making preparations to build." Of these 34 Georgia is credited with 13, or more than double the number in any other State.

Of the next table taken from this same report the following statement is made: "All the figures are based upon actual statements made by the officials of the mills in operation, which include woolen as well as cotton-mills, showing their monthly purchases during the season, their statements having been revived at the close of the year. Of the 501 mills not a single one failed to report, either to the Department directly or to the Department's special agent detailed for this work."

COMPARATIVE MILL STATISTICS FOR 1898-99 AND 1899-1900.

[In commercial bales.]

STATES	Number of Mills		Bales Purchased		Per Cent. of Increase or Decrease of Bales Purchased	
	1898-99	1899-1900	1898-99	1899-1900	Increase	Decrease
Alabama.....	38	44	121,128	154,841	27.8	.....
Arkansas.....	8	4	3,288	2,394	.....	27.2
Georgia.....	79	86	281,527	318,302	18.1	.....
Kentucky.....	11	10	25,447	26,008	2.2	.....
Louisiana.....	8	5	18,749	15,695	.....	16.3
Mississippi.....	7	10	21,650	21,440	.....	1.0
Missouri.....	3	4	3,017	8,720	23.3	.....
North Carolina.....	169	190	874,891	442,508	18.0	.....
South Carolina.....	80	93	466,181	489,559	5.0	.....
Tennessee.....	29	32	36,858	84,882	.....	4.1
Texas.....	5	6	17,156	16,868	.....	1.7
Virginia.....	17	15	44,502	44,595	0.2	.....
Utah and Kansas.....	1	2	84	186	447.0	.....
Total.....	445	501	1,413,928	1,570,998	11.1	.....

The following table shows the cotton crop of each State for the season of 1899-1900, the amount of cotton purchased by the mills of each State, the amount taken by the mills of one State from the crop of another, etc.:

CROPS AND MILL CONSUMPTION, 1899-1900.

[Commercial bales.]

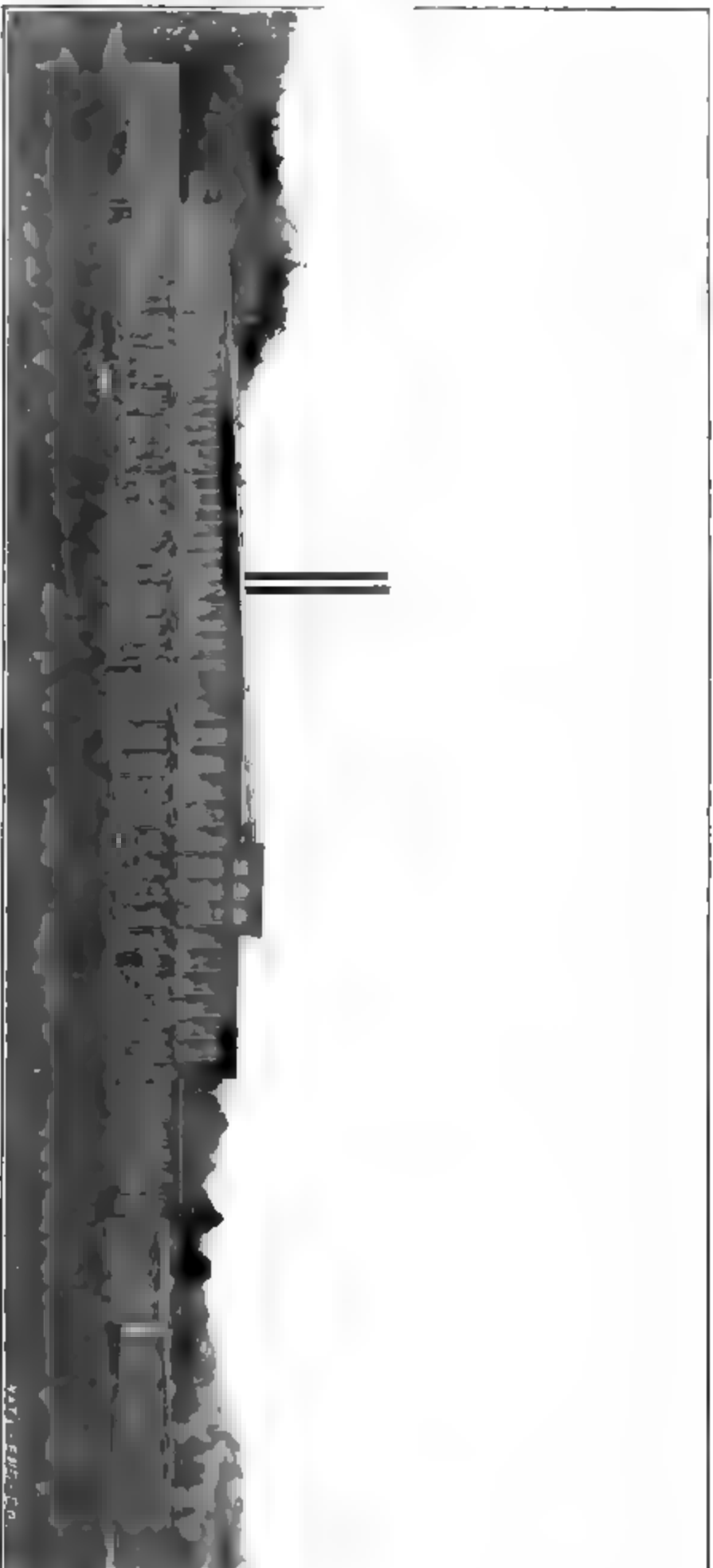
STATES	Crops	Total mill consumption	Taken by mills from other States	Per cent. of State's production taken by mills within the State	Per cent. of mill consumption taken from other States
Alabama	1,005,313	154,811	18,929	14.0	9.0
Arkansas	669,385	2,394	64	0.8	2.7
Georgia	1,845,699	818,802	16,289	22.4	5.1
Kentucky	24	26,008	26,008	.....	100.0
Louisiana	699,476	15,695	.....	2.2	.....
Mississippi	1,203,739	21,440	262	1.8	1.2
Missouri	17,275	3,720	3,720	.....	100.0
North Carolina	503,825	442,508	148,487	58.4	33.6
South Carolina	830,714	489,559	119,100	44.6	24.3
Tennessee	192,263	34,882	13,187	11.3	37.8
Texas	2,438,555	16,868	.....	0.7	.....
Utah and Kansas	214	186	60	.....	.....
Virginia	8,007	44,595	43,570	12.8	97.7

Woolen-Mills.—The woolen industry of Georgia has been subject to considerable fluctuation. The first woolen factory in the State was reported in 1840. The number increased to three in 1850, eleven in 1860, and 46 in 1870. The capital invested also showed a steady increase during the same period, reaching the maximum of \$936,585 in 1870.

With the decline of sheep-raising and wool-producing in Georgia, came a falling off in the number of mills and the capital invested in them, and in 1880 there were 32 mills with a capital of \$180,733, and products valued at \$239,390. In 1890 the number of establishments engaged in the manufacture of woolen goods in Georgia was 18, of which 4 were equipped with machines for making hosiery and other knit goods, and the rest with spindles and looms for the production of woolen cloth, such as jeans, doeskins, kerseys, satinets, cassimeres, and cheviots. Though the number of mills was less than in any other decade since 1860, the capital invested, \$420,033, was larger than that reported at any census except that of 1879, and the value of the product, \$340,095, is clear beyond that of 1880.

Labor.—By reason of her climate the cost of living in the South is much less than at the North. In Georgia the laborer can live in comfort for less money. Hence he can, without injustice to himself and family, work for smaller wages.

According to the report of the United States Commissioner of Labor in 1891, the average expenditures of each individual amounted in Geor-



ARAGON COTTON MILLS, ARAGON, GA.

gia, to \$94.26, and in Massachusetts to \$177.93. The detailed statement of the Commissioner as to the condition of families and their indulgences in the comforts of life proves that the difference in the cost of living was not due to the failure of the Georgia operative to provide healthful food and the comforts of home. Neither does Georgia labor under any disadvantage from lack of ability on the part of the native Southern mill operative. The factory hands employed in the cotton and woollen-mills of Georgia are nearly all American, mostly natives of the Southern States. They have up to this time shown great aptitude for their work, and soon become skilled and proficient laborers.

Although of late years there has been a wonderful growth in Georgia in the manufacture of higher grade fabrics, the improvement of the native workman has kept pace with this growth. The marvelous increase of the number of mills and spindles in Georgia during the last two years gives assurance that this State with unsurpassed advantages and inducements will continue either to lead or to stand in the front rank of this great and wonderful advancement.

With the splendid advantages for sheep-husbandry offered by Georgia there is no reason why there should not be raised in this State millions of these wealth-producing animals, whose wool would build up a milling industry rivaling in extent that of cotton, and increasing immensely the prosperity of the people and the revenues of the State.

Silk Factories.—An industry which in the last few years has grown rapidly in the United States is the manufacture of silk. In 1890 there were 718,360 spindles and 20,822 looms. In 1900 there were 1,426,245 spindles and 48,246 looms. It is mostly confined to the northern States; but Virginia and North Carolina have entered this field, each with 30,000 spindles. North Carolina has also 1,455 looms, and Virginia 350. Although Georgia was originally intended to be a silk-producing country, at this time the State is taking no part in this business. Yet the founders of the colony of Georgia thought that its chief industry would be the production of raw silk. General Oglethorpe in speaking of the possibilities of the colony said: "It must be a weak hand indeed, that cannot earn bread where silkworms and white mulberry-trees are so plentiful." Perhaps at some future day Georgia will realize in this industry the expectations of its founders.

Cotton seed Oil Mills.—The value of the cotton seed, as food for stock, for oil and for fertilizing purposes, was long unknown. When the farmer had gathered his cotton and ginned out the seed, he baled the lint and sold it for the best price that it would bring, and thought that he had received all the possible profit of his crop. No longer is this the case.

Among the farmer's profits now must be counted those derived from the sale of his cotton seed, for which the rapidly increasing cotton seed-oil mills have created a great demand. This by-product of the cotton is worth to the farmers of Georgia millions of dollars annually. Not even the cotton factory, whose coming to the fields, is hailed as a harbinger of good to the planter, is more closely allied to the agricultural interests of Georgia than the mills that utilize the seed, once held in such poor esteem. They furnish to the farmer the meal, the cakes and hulls, a cheap and wholesome food for all farm animals, supply him with an excellent fertilizer, and give him in the cotton seed-meal a material largely used by the manufacturer of fertilizers to supply nitrogen in his chemical fertilizer. This meal the farmer can use upon his fields either alone or in the compost heap, thus giving to them that most costly of all plant foods, nitrogen.

The oil extracted at these mills has many uses. The crude oil, often refined, is known as summer oil. A prime, summer, yellow oil, also called butter oil, is used in making oleomargarine, butterine, cottolene, etc. A selected yellow oil, subjected to cold pressure, becomes a salad oil, and is used in cooking. Bleached summer oil, also known as summer white oil, is used for making compound lard and similar articles. When this same oil has been cold pressed, it is called winter white oil, and is used in miners' lamps and for making various medicinal compounds. The ordinary summer yellow oil is used for tempering steel and other manufacturing purposes.

Cotton seed oil ranks next to sperm for purposes of illumination. It is however, in greatest demand as a food oil, and has to a considerable extent taken the place of olive oil. The stearine which is left on the cloths in the filter press, when the oil is refined, is used in making butter, lard and candles.

We can easily see that the cotton seed-oil mill is a very important industry in Georgia. The farmer has a sure market for all his seed not needed in planting. As we have said in a previous chapter, for every pound of lint cotton there are two pounds of cotton seed, which is sold at \$6, \$11, and even \$24 a ton.

In 1880 there were no cotton seed oil-mills in Georgia. By 1890 there were 17, with a capital of \$992,131, paying for material \$1,298,421 and giving a product valued at \$1,670,196. By 1896 there were 20 of these mills paying for seed \$1,400,000 annually, and giving a product valued at \$1,800,000. In the year 1900, there were 52 active oil mills with an approximate capital of \$2,500,000, not counting money borrowed on mortgages. These mills paid last year \$5,000,000 for cotton seed



CANNING TOMATOES AND PEACHES.

alone, not counting other material necessary for manufacturing the raw material into commercial products. The value of these products was for last year \$14,000,000 approximately. Six new mills are in process of construction.

LIST OF GEORGIA OIL MILLS.

- Americus Oil Co., Americus, Ga., M. S. Harper, Mgr.
Athens Oil & Fert. Co., Athens, Ga., J. A. Smith, Pres., Abbeville, S. C.
Arlington Oil & Fert. Co., Arlington, Ga.
Blackshear Mfg. Co., Blackshear, Ga.
Co-operative Mfg. Co., Forsyth, Ga., P. B. Maynard & Co., Mgrs.
Carrollton Oil Mills, Carrollton, Ga., J. A. Aycock, Mgr.
Excelsior Mfg. Co., Washington, Ga., J. A. Benson, Pres.
Elberton Oil Mills, Elberton, Ga., A. E. Thornton, Pres., Atlanta, Ga.
Farmers Cotton Oil Mfg. Co., Locust Grove, Ga., A. G. Combs.
Fort Gaines Oil & Guano Co., Fort Gaines, Ga.
Griffin Oil & Fert. Co., Griffin, Ga., Walker Bros.
Gainesville Oil Co., Gainesville, Ga., J. D. Woodside, Pres.
Gate City Oil Co., Atlanta, Ga., John Oliver, Pres.
Georgia Cotton Oil Co., Atlanta, Ga., W. J. Montgomery, V-Pres.
Georgia Cotton Oil Co., Macon, Ga., R. S. Patillo, Mgr.
Georgia Cotton Oil Co., Augusta, Ga., J. H. Taylor, Mgr.
Georgia Cotton Oil Co., Rome, Ga., W. M. Towers, Mgr.
Georgia Cotton Oil Co., Columbus, Ga., J. A. Walker, Mgr.
Georgia Cotton Oil Co., Albany, Ga., J. R. Forrester, Mgr.
Georgia Farmers Oil & Fert. Co., Madison, Ga., B. A. Warlick, Mgr.
Grovania Oil Co., Grovania, Ga.
Hardman Oil Co., Harmony Grove, Ga., L. G. Hardman, Pres.
Interstate Cotton Oil Co., Augusta, Ga., J. D. Dawson, Mgr.
Jefferson Oil Mill, Jefferson, Ga., H. W. Bell, Pres.
Jackson Oil Mill, Jackson, Ga., H. M. Mallet, Pres.
Lathrop Oil Mills Co., Hawkinsville, Ga.
LaGrange Mills, LaGrange, Ga., J. M. Barnard, Pres.
Lavonia Cotton Oil Co., Lavonia, Ga., L. H. Meekin, Mgr.
Middle Ga. Oil & Fert. Co., Hogansville, Ga.
McBride Oil Co., Newnan, Ga., R. McBride & Co.
Macon Oil & Ice Co., Macon, Ga.
Milledgeville Oil Mills, Milledgeville, Ga., A. E. Thornton, Pres.
Monroe Guano Co., Monroe, Ga., T. C. Mobley, Secy.
McCaw Mfg. Co., Macon, Ga., W. E. McCaw, Pres.
Mutual Oil Co., Macon, Ga., Mr. Gray.
Pelham Oil Mill, Pelham, Ga., or Hand Trading Co.
Rockdale Oil & Fertilizer Co., Conyers, Ga.
Smithonia Cotton Oil Mills, Smithonia, Ga., J. M. Smith, Prop.
Southern Cotton Oil Co., Savannah, Ga., L. W. Haskell, Mgr.

Southern Cotton Oil Co., Atlanta, Ga., L. A. Ransom, Asst. Mgr.
 Talbot Co. Oil Mills, Talbotton, Ga.
 Valdosta Guano Co., Valdosta, Ga.
 West Point Oil Mills, West Point, Ga., D. H. Hickey, Mgr.
 Wilkins & Jones, Waynesboro, Ga.
 Waynesboro Oil Mill & Fert. Co., Waynesboro, Ga.
 Cedartown Cotton Oil Co., Cedartown, Ga.
 Conyers Oil Co., Conyers, Ga.
 Dublin Oil Mills, Dublin, Ga.
 Dawson Oil Mills, Dawson, Ga.
 McBurney Oil & Fert. Co., Warrenton, Ga.
 Walton Oil Co., Social Circle, Ga.
 Washington Co. Oil Co., Tennille, Ga.

Cotton Ginning.—Of course every farmer must have recourse to a cotton-gin in order to separate the lint from the seed. Cotton ginneries are divided in the census reports into three general classes, viz.: those conducted exclusively for the public; those conducted exclusively for the plantation; those conducted for both the public and the plantation.

The following table gives the number and character of ginneries and number of months operated for crop of 1899 by States and Territories: number of months operated for crop of 1899-1900 by States and Territories:

States and Territories.	NUMBER OF GINNERIES.				Average number of months in operation for crop of 1899.
	Total.	Operated for—			
		The public only.	The plantation only.	Both.	
Total	29,620	6,468	2,863	20,289	3
Alabama	4,034	792	391	2,851	3
Arkansas	2,630	668	183	1,829	3
Florida	236	78	10	153	3
Georgia	4,729	696	572	3,461	4
Indian Territory	297	215	6	76	4
Kansas	2	1	.....	1	2
Kentucky	2	1	.....	1	1
Louisiana	2,148	190	861	1,597	3
Mississippi	3,976	519	580	2,877	4
Missouri	56	40	.....	16	3
North Carolina	2,573	431	278	1,864	3
Oklahoma	133	109	.....	24	3
South Carolina	3,308	298	381	2,689	3
Tennessee	834	255	45	534	3
Texas	4,514	2,165	100	2,249	4
Virginia	88	15	6	67	3

It will be seen that Georgia came first in 1899, in the total number of ginneries, Texas second and Alabama third.

In 1879 a large percentage of the cotton crop of the United States was handled by private ginneries, and their motive power consisted for the most part of horses or mules, and their daily capacity was from three to five bales.

The introduction of steam power has crowded out the primitive horse ginneries to such an extent that they are now almost a thing of the past.

Of the 29,620 cotton ginneries in the United States in 1899, only 2,863, or less than 10 per cent., are reported as ginning exclusively for the plantation, and a very small percentage of these are of the old-fashioned horse-power variety.

Fertilizer Manufactories.—Georgia consumes more chemical fertilizers than any other State in the Union. With all her advantages for diversity of manufactures she ought to be the largest producer. She does outrank all the Southern States in this industry, and always produces enough to supply the needs of our own people if the entire products were consumed in the State. But some of the Georgia farmers purchase fertilizer goods manufactured in other States, while a large part of the Georgia product is shipped abroad and sold outside our borders. This business is closely allied to that of the cotton seed-oil mill; for the cotton seed-meal produced by the latter is extensively used for the purpose of supplying nitrogen in the goods prepared by the fertilizer manufacturer.

In 1880 there were in Georgia only three fertilizer factories giving employment to 67 men who received \$22,872 in wages, and produced goods valued at \$256,500. In 1890 there were 44 establishments with a total capital of \$5,501,881, in which 1,328 laborers were employed, whose wages amounted to \$484,889, and whose product amounted in value to \$5,026,034.

In October, 1899, there were 110 fertilizer establishments of which 32 were also enlarged in the manufacture of cotton seed-oil. Besides those were 30 establishments from other States, North and South, selling fertilizers in Georgia. A special act of the legislature passed and approved October 9, 1891, places all this business under the control of the commissioner of agriculture and protects the farmer from fraudulent fertilizers.

A special bill, approved July 22, 1896, also forbids the sale of any cotton seed-meal that is shown by the official analysis to contain less than $7\frac{1}{2}$ per cent. of ammonia, provided this shall not apply to long-staple cotton, the analysis of which must show not less than $5\frac{1}{2}$ per cent. of ammonia.

A third bill approved December 21, 1897, prescribes the manner of branding and grading commercial fertilizers.

In 1900 Georgia consumed 412,755 tons of fertilizers. The consumption for 1901 amounted to about 478,000 tons, showing a considerable increase.

Other Chemicals.—For the manufacture of other chemicals in Georgia there were five other establishments in 1890 with a total product valued at \$680,497. Among the items enumerated were paints, varnishes, japs and pharmaceutical preparations. This business has greatly increased in every way within the last decade.

Lumber Manufacture.—This is one of the most extensive industries in the State, and together with the tar and turpentine business has brought into the cities of Savannah and Brunswick a vast quantity of material for exportation, making the former of those cities the greatest lumber and naval stores market in the world. The trade arising from these industries adds much also to the prosperity of the smaller Georgia ports of Darien and St. Marys. There were reported for the census of 1890 lumber mills of all kinds in Georgia to the number of 516, whose total product was placed at \$9,855,067. Of these mills 434 were engaged in producing lumber and other mill products from logs or bolts, while 82 were planing-mills, manufacturing sashes, doors, blinds, boxes, and other planing-mill products, such as wood turned and carved and all kinds of carpentry material. The basis of this immense business is the far-famed long-leaf pine of Southern Georgia, for which millions of feet of lumber are annually marketed. Its durability and adaptability for every class of building, interior decoration and many kinds of ornamental work, have gained for it high esteem. In the Appalachian range through North Georgia there are also extensive forests of hardwood trees, which are comparatively undeveloped. In many of the counties there are bodies of these trees from which the planing-mills gather material for the manufacture of furniture of all sorts. Between 1880 and 1890 there was a very great increase in the planing-mill product. This increase was from \$737,200 to \$3,548,972 within the decade. It has been estimated that the valuation put upon the total lumber output of Georgia by the United States census of 1890 was at least 50 per cent. short of the actual value. Great difficulty attends the securing of exact reports.

Rosin and Turpentine.—This business depends on the long-leaf pine of Southern Georgia, and is known as navel stores. The rosin is drawn from the standing tree which, after the exhaustion of its sap, is cut down, transported to the mill, and sawed into lumber. The increase in the output of this business has kept pace with that of other industries of Geor-

gia. The value of the entire product in 1880 was \$1,455,739. By 1890 it had more than doubled and amounted to \$4,242,255.

When the trees have been removed there remains a cleared field well suited to agricultural purposes, in some instances adapted to the raising of the highest priced cotton, the long-staple or sea-island variety, or other staple crops. Especially are these fields fitted to the planting of market gardens for raising fruits and vegetables, a business for which there is an ever-increasing demand in the growing cities of our own State, or those of the whole Atlantic coast from Brunswick, Georgia, to Boston, in Massachusetts.

Considering the whole product of the pine forests together, there is probably as much capital invested in it as in any other one interest, perhaps more. An Atlanta capitalist purchased a tract of timber land in South Georgia for which he paid \$75,000. After having sold from it enough lumber to pay for the property, he estimates that there remains on it enough timber to bring him, when cut, \$150,000. When the land has been cleared at a big profit to himself he expects to use the tract for fruit-growing or for general farming purposes. This is only one example among many of the great possibilities of Southern Georgia.

Furniture Factories.—This is a large and profitable business in Georgia. According to the census of 1890 the capital invested in all lines of this business amounted to \$1,036,825, and the value of the products for that year was \$1,633,813. This industry has been greatly enlarged during the last decade. The 13 establishments of the city of Atlanta alone reported in 1897 an annual product worth \$1,164,000. Much of the furniture manufactured is of a high grade, and is largely sold in the Eastern markets. This is especially true of Atlanta, whose furniture factories are always represented at the annual exhibit at Grand Rapids, Michigan. The growth in this business in the last three years has been very great.

Foundries.—Georgia has no great iron plants like those of Alabama and Tennessee; and yet there is in the State a well developed iron industry, in which a large capital is invested and from which large profits are derived. The many foundries manufacture machinery, agricultural implements, boilers, cotton-gins and castings. The census of 1890 showed that there were in Georgia 52 iron foundries with a capital of \$2,107,969 and an annual output valued at \$2,272,653.

The cotton-gins and presses manufactured in Georgia are unrivaled. Often the factories, working night and day, can hardly supply the demand from every section of the South.

Ornamental Iron Works.—The business of making architectural and

ornamental work from iron is of considerable importance and is on the increase in Georgia. By the census of 1890 there were in the State three factories for turning out this kind of work. The capital invested in them was \$67,242 and their product was worth \$110,075.

Iron and Steel.—One of the most notable features of the growth of the iron and steel industry of the United States is the activity displayed in the Southern States in the erection of iron-making plants. Steel-making, though not wholly neglected, has not formed a prominent feature of this metallurgical development. Under the head of "iron and steel industry," the census of 1890 reported for Georgia five establishments which had at that time a capital of \$908,243 and a product valued at \$471,357.

Blast Furnaces.—In speaking of the pig-iron industry of the Southern States the United States census report of 1890 said: "This section has long been noted for the excellent character of the charcoal pig-iron produced within its borders; but prior to 1880 attention was not especially directed to its extensive and easily worked deposits of iron ore, nor to the advantages which the close proximity of coking coal and limestone to these deposits afforded for the production of coke pig-iron at low cost. During 1880 the Southern States produced 9.27 per cent. of the aggregate pig-iron yield of the United States, but in 1890 the furnaces in this section contributed 18.52 per cent. of the total output, the increase in tonnage over 1880 being 423.52 per cent." According to the census of 1890 there were in the State of Georgia four blast furnaces with a capital of \$748,845, and an output valued at \$339,422. "The pig-iron industry of Georgia," says the census report, "remained practically stationary during the decade from 1880 to 1890." The greater part of the iron ore mined in Georgia is shipped beyond the State.

Carriage and Wagon Factories.—Under this heading are included custom work and repairing. There were in 1890 as many as 129 of these factories in Georgia, some of them doing the best grade of work. The buggies manufactured at Barnesville enjoy a fine reputation.

The capital employed by these establishments in 1890 was \$849,441 and their output was valued at \$1,221,119. The number of establishments, their capital and product have steadily increased in the last decade.

In addition to these factories were several where carriage materials were made.

The Blacksmithing and Wheelwrighting Establishments, which ten years ago numbered 331, with an aggregate capital of \$245,721, turned out annually work worth \$265,315.



STEVENS POTTERY WORKS, BALDWIN COUNTY.

Car Shops.—Most of these are operated by the railway companies, and are for construction and repairs. At some of them excellent box-cars for freight and handsome passenger coaches are made. The number reported in 1890 was eleven, with a capital of \$450,512, and doing work worth \$842,610. The rapid increase of business on the railroad lines, and the constant need for new cars and for repairs to old ones, insure constant employment for many hands in this kind of work.

Flour and Grist Mills.—The falling off in the cultivation of wheat between 1880 and 1890 led to a corresponding decrease in the number of mills, the capital invested, and the value of their products. During that decade the numbers of mills decreased from 1,139 to 719, their capital from \$3,576,301 to \$2,347,835, and their output showed a corresponding decrease. A revival of wheat growing has commenced in Georgia, and with it a revival of the milling industry. Many old mills that had shut down have started up again, and new ones have been built.

The Bread and Bakery products are always in demand, whether the flour used be imported or made at home. Hence the rapid increase in the population of Georgia between 1880 and 1890 caused almost a triple increase in these products for the same periods. Twenty-six establishments with a capital of \$118,450 and a product worth \$464,162 had increased to 76 establishments with a capital of \$394,356, and products worth \$1,241,349.

Brick and Tile Manufactories.—The presence of so much excellent material for the manufacture of brick in Georgia has led to the erection of many establishments devoted to this industry, in which Georgia takes high rank among the States of the South. The brick and tile manufactories showed between 1880 and 1890 a very gratifying increase.

Although the 76 establishments of 1880 had been reduced to 61, the capital of \$212,660 had increased to \$950,263, and the product of \$409,025 had grown to \$1,201,542. With the growth of cities and towns this business is sure to increase.

Clay and Pottery Products.—In addition to brick and tiles there are other products of clay, such as pottery, drain and sewer pipes, etc. For the manufacture of the various articles from clay (exclusive of brick and tiles), there were in Georgia in 1890 seventeen establishments with an aggregate capital of \$229,269 and an annual output valued at \$211,250. There has been during the last decade a gratifying increase in this business.

Ocher Mills and Paint Industry.—Ocher, the basis of paint, is one of the mineral products of Georgia. The mining and shipment of yellow ocher has become a considerable business in Bartow county. There are

at Cartersville four mills for the handling of this material. The shipment of ocher from this county for the year ending August 1, 1900, amounted to 4,500 tons, which, at the average price of \$12.29 a ton, amounted to \$55,305. Superior natural advantages for the grinding and mixing of ready mixed paints are enjoyed by the manufacturers of these articles in Atlanta where the market for them is always good.

Ice Plants.—The factories for the manufacture of artificial ice, which in 1890 numbered 16 with an aggregate capital of \$487,534, have greatly increased their capital and business and have with their much cheaper products, run out of the markets of Georgia the imported natural ice which in former years was sold at such high figures that comparatively few people could indulge in what was then an expensive luxury.

Electric Light Plants.—Although electric lighting had been introduced into our large cities previous to 1890, no report of these plants appeared in the eleventh census. There are now 50 of them in Georgia brilliantly illuminating all our large cities and many of the smaller ones, including towns of less than 3,000 inhabitants.

Electric Motors.—The electric plants furnish the motor-power for propelling cars on the streets of cities, and in several instances giving to the large cities such frequent and rapid connection with neighboring towns and all the intervening country as to make of them practically one community. All the large cities of Georgia and some of the smaller ones have excellent systems of electric railroads.

Gas for Illuminating and Heating.—Before the days of electric lights and motors, gas was the great illuminating power, and was long the best dispenser of light in darkness for cities and towns. Although surpassed in brilliancy by electricity, its days of usefulness are not yet ended even in buildings where electric lights are used. Its utility as a supplier of heat for household purposes is appreciated wherever the gas-stove is used for warming offices, or for avoiding in summer the excessive heat of wood or coal by means of the neat and convenient gas-stove. The million and a half dollars invested for gas illuminating and heating in Georgia cities and towns in 1890, still finds reason for the increase of its capital, and abundant demand for the bestowal of its benefits upon the people.

Printing and Publishing.—Nor is Georgia a laggard in printing and publishing, especially of newspapers and periodicals. Her many hundred establishment, with capital and product running up into the millions, show the high position which she holds in this respect. Some of her leading newspapers rank among the first in America and are found on sale in the chief cities of the Union.

Marble and Stone Work.—Georgia marble and stones for building and

for monuments, enjoy an enviable reputation throughout the whole Union. In 1890 under the heading given to this paragraph the United States census gave the total value of products as \$375,520. According to Dr. Day, of the United States Geological Survey, the value of the marble production for 1899 was \$742,554, and of granite \$411,344. This shows a wonderful and gratifying increase.

Ship-Building.—Georgia was also represented by this industry in the census report of 1890, according to which four establishments with a capital of \$156,100 turned out work valued at \$126,300 for the year in which the report was made.

Paving and Paving Materials.—In the manufacture of paving materials and in paving the \$67,000 invested in 1890 showed a product valued at \$513,648, showing a splendid profit on the investment. This business has also enjoyed a wonderful increase in the last decade.

Roofing, Etc.—Roofing and roofing materials with a capital of \$40,000 showed also a product of \$180,960, while tin smithing, coppersmithing and sheet iron working for an investment of \$282,770 reported a product worth \$528,814.

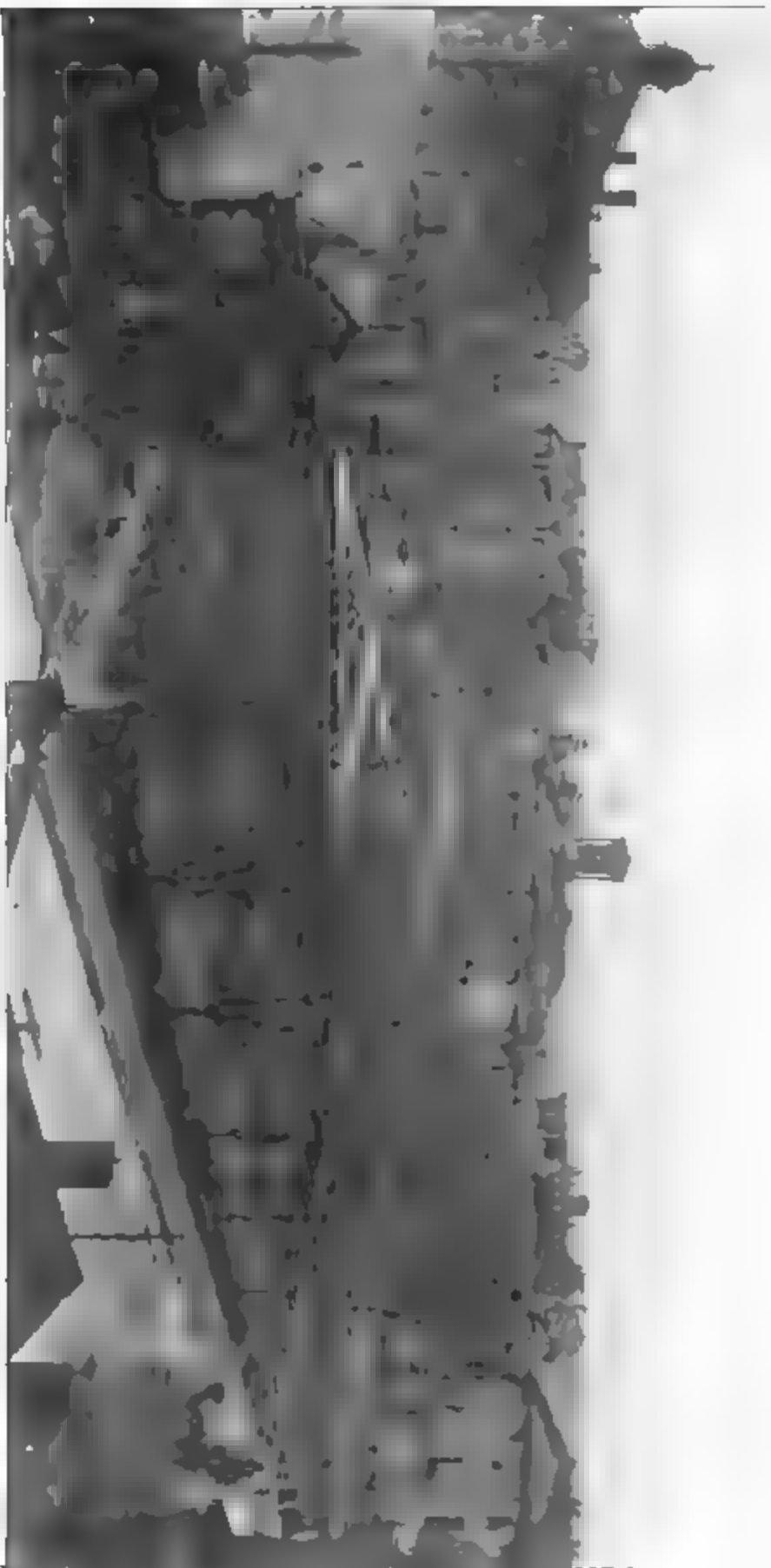
Carpenter Work.—This is always in demand in town and country, and the business is bound to increase with population and wealth. The value of work runs up into the millions.

Other Industries.—Other industries that make a good showing in census reports are factories for boots and shoes, brooms and brushes, clothing, coffins, burial cases and undertakers' goods, dentists' materials, drugs, perfumes and cosmetics, confectionery, cooperage, dyeing and cleaning, hand stamps, leather, tanned and curried, lime and cement, liquors, distilled and malt, lock and gunsmithing, looking-glass and picture frames, masonry, brick and stone, mattresses and spring beds, musical instruments, millinery, painting and paper hanging, paper and paper bags, plastering and stucco work, photography, plumbing and gas fitting, saddlery and harness, shirt manufacturers, the manufacture of chewing and smoking tobacco and snuff, manufacture of trunks and valises, umbrellas and canes, vinegar and cider, watch, clock and jewelry repairing and wooden ware. All these manufactures of Georgia here bunched together, but stated separately in the census report on manufactures, represent a combined capital and a value of products covering several million dollars. Then the census enumerates a long string of small industries, some of which are baskets and willow ware, lithographing and engraving, stereotyping, electrotyping, wire work, rope, cable, etc. To name them all would require much space. They represent altogether a capital of nearly \$2,000,000 and a product of more than \$3,000,000.

Canning Factories.—The canning and preserving of fruit made but a small show in the census of 1890. But at the present time this has become a great industry in the fruit sections of Georgia. The four canning establishments of 1890 have increased to 10.

Creameries.—This is an industry which does not appear at all in the census of 1890. But the growth of dairy farms in Georgia has created new wants, and creameries are the result. There are now three of these establishments, which purchase the products of the dairy farms and manufacture butter and cheese.

The growth of the manufacturing interests of Georgia has been very rapid within the last twenty years. Many old establishments have been greatly enlarged, many new enterprises giving employment to thousands of laborers have been established, and manufactures of all kinds have increased to such a point, that scarcely any industry lacks representation.



CAMPUS, UNIVERSITY OF GEORGIA.

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CHAPTER XIII.

EDUCATION IN GEORGIA.

In the earliest days of the colony of Georgia provision was made for the education of the people. For this purpose the rents of certain lands were set apart by the crown in every parish, as the counties were then called, and good schools were established at Savannah and Augusta. When the Salzburgers settled at Ebenezer, the schoolmaster accompanied the pastor, and education walked hand-in-hand with religion. Education received the careful attention also of the Puritan colonists who settled in St. John's Parish, afterward known as Liberty county. Immediately after the conclusion of the war of the Revolution the Legislature of Georgia began to provide ways and means for the promotion of this great interest.

Previous to the great civil war there was no system of public schools in the State. But under the conditions then existing they were not the necessity that they now are. Private schools and academies were numerous, and were taught by excellent teachers who had to build up their schools by their fidelity to duty and ability in their profession. The greater part of the people were able to educate their children, and doing so were careful to get their money's worth by patronizing teachers who were thoroughly competent for the work undertaken. The instruction of poor children was provided for by appropriations made by the legislature, and it was frequently so well managed that the pay pupil of a school did not know who the beneficiaries were. In some of the cities there were flourishing free schools, which were sometimes presided over by teachers of such ability that the children of well-to-do parents were enrolled among the pupils.

Just before the war between the States steps were being taken for the establishment of a system of public schools. What has been done in Georgia on this line will be discussed farther on.

As far as the action of the State government is concerned the attempts to promote the cause of education in Georgia began at the top and worked downward. Immediately after the War of Independence (1784), the legislature of Georgia took measures for establishing a State University. A charter for this purpose was granted on January 29, 1785. In

November, 1801, the site was selected, and 630 acres of land, on which the flourishing city of Athens is now principally located, were sold off in lots for the benefit of the college. This land was the gift of Governor John Milledge. The first commencement exercise took place in May, 1804, on the present college campus, under an arbor formed of the branches of trees. At first the institution was partly sustained by the rent of lands given to it by the State. As this plan did not work well, the lands were all sold, and payment was made in the notes of the purchasers, secured by mortgage. By act of the legislature of December 16, 1815, the governor was authorized to advance to the trustees any amount not exceeding two thirds of the sum called for by these notes, and to receive the notes in lieu of the same. The amount agreed upon was \$100,000, but as the money was not paid, this sum was regarded as a debt due to the University by the State, and it was agreed that an annual interest of 8 per cent. should be paid upon the same. Accordingly the trustees of the University have ever since received from the State the sum of \$8,000 per annum. Other amounts have been appropriated by the State for the University as follows:

From 1830 to 1841 the amount of \$6,000 per annum, to replace losses by fire in 1830; in 1875 the sum of \$15,000 for furniture, apparatus and general outfit of the State College of Agriculture and the Mechanic Arts; a gift of \$2,000 in 1881 for the purpose of establishing free tuition, and another of \$3,000 in 1883 for repairs. In 1854 Dr. Wm. Terrell, of Hancock county, bequeathed \$20,000 to the University; in 1873 the city of Athens presented it with \$25,000 for the erection of Moore College; in 1883 Senator Joseph E. Brown gave the trustees \$50,000, invested in 7 per cent. bonds of the State of Georgia, the interest to be devoted to educating worthy young men unable to pay their way. In 1866 the State of Georgia, by legislative enactment, accepted from the government of the United States the gift of 30,000 acres of land for each senator and representative in Congress, and in 1872 Governor James M. Smith transferred the fund arising from the sale of the lands to the trustees of the University of Georgia, who, in May of the same year, opened and established the Georgia State College of Agriculture and Mechanic Arts as an integral part of the University. In 1873 the Medical College of Augusta became one of the departments of the State University.



STATE NORMAL SCHOOL, ATHENS, GA.



GIRLS' DORMITORY, STATE NORMAL SCHOOL, ATHENS, GA.

DEPARTMENT OF AGRICULTURE, UNIVERSITY OF GEORGIA.

The science of Agriculture and Horticulture is taught, with practical illustration and experiment, in the School of Agriculture at the University of Georgia. This is one of the Departments of the State College of Agriculture and the Mechanic Arts, which is presided over by Dr. H. C. White, and which, together with Franklin College, presided over by Dean D. C. Barrow, composes the University at Athens. The Department of Agriculture is in charge of Prof. H. N. Starnes, a native Georgian, familiar with the agricultural situation in our State. He is an alumnus of the University, and was formerly connected with the Experiment Station at Griffin.

The Trustees have recently appropriated \$5,000 to the Department of Agriculture, and it is expected that with this liberal expenditure there will be rapid development and growth in the Department.

TWO COURSES.

Two courses are given in this Department; first, the full course, extending from the Freshman through the Senior year; second, the short winter course, extending from January 1st to February 15th of each year. These two courses are fully described in the catalogues and in circulars which will be sent on application to the office of the chancellor of the University.

The following is a brief summary of the work done in the two courses:

THE FULL COURSE.

The study of the Freshman year is Botany, and is in the School of Biology. Any student otherwise prepared to enter the Sophomore class will be allowed to make up Botany in his Sophomore year. In the other years the course covers the following topics:

- (a) Plant production.
- (b) Soils (classification and composition, etc.), tillage, drainage, etc., fertilization, rotation of crops, etc.
- (c) Farm crops, each in detail, with the parallel course in Agricultural Chemistry, by Dr. H. C. White.
- (d) Spraying.
- (e) Animal Industry (breeding, feeding and care of live stock).
- (f) Agricultural Technology (butter and cheese making, canning, syrup making, etc.).

(g) Horticulture (small fruits, orchard fruits, pruning, grafting, packing, shipping, etc.).

(h) Terracing, road, bridge and fence construction.

This course, in connection with other studies (see catalogue), leads to the degree of Bachelor of Science in Agriculture.

THE SHORT WINTER COURSE.

This course, lasting for six weeks, and beginning January 1st, is intended principally for farmers' sons and others who are unable to take the full course.

No fees of any sort are required. The time is fixed at the period when such persons can best afford to be absent from the farm.

This course covers the most important topics of the full course. While the selection of subjects is limited and the treatment necessarily brief, it is believed that the students in this course will acquire the point of view which will make all the difference between the empirical and the scientific farmer.

Those who are interested in agricultural education in the State are requested to send to the office of the chancellor of the University the names of farmers' sons and others who might be interested in this course. Catalogues and other information will be sent to them.

PRACTICAL APPLICATION OF THE TEACHING.

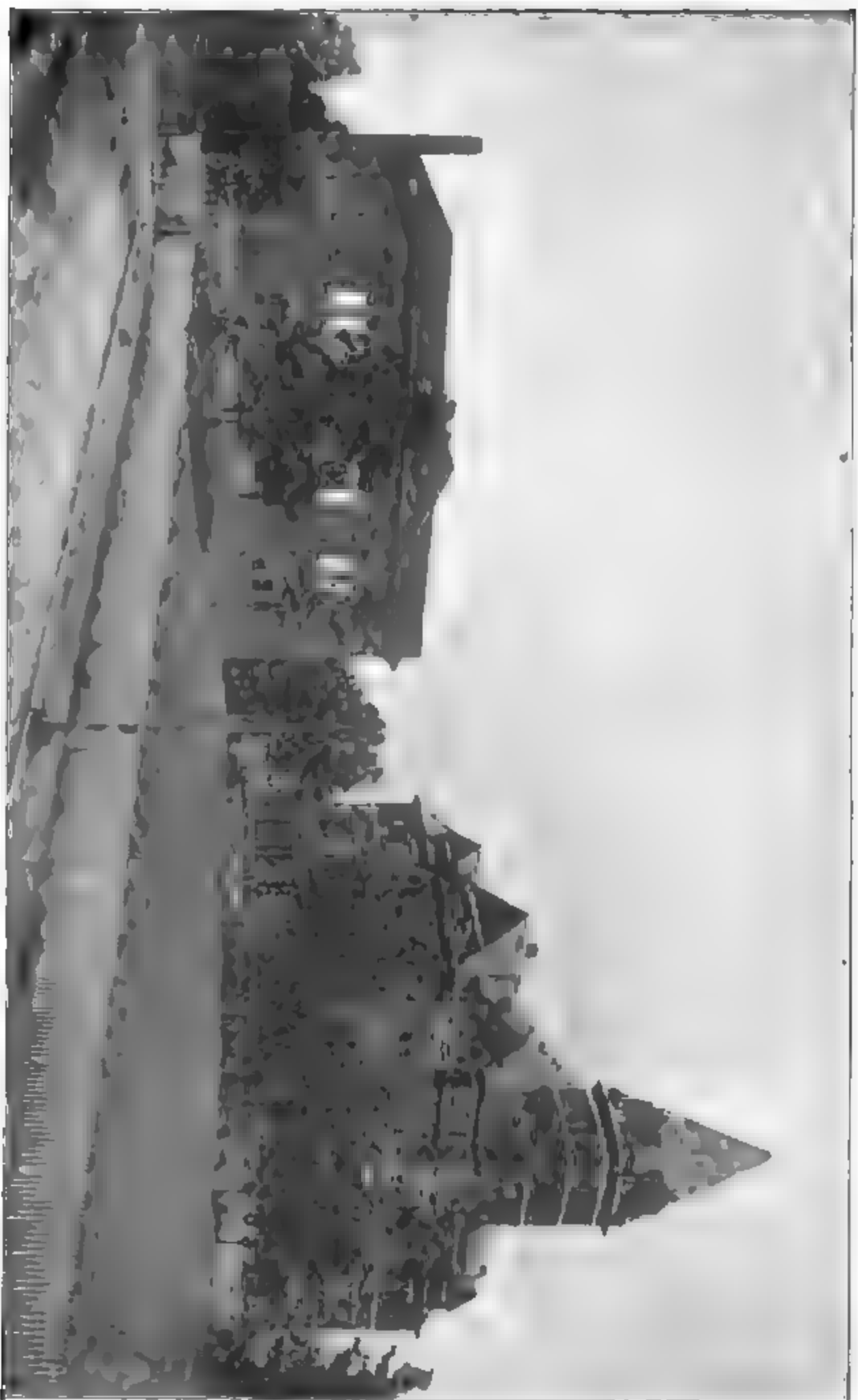
The campus, the University farm and the Agricultural Museum constitute the means for aiding the instruction, by means of illustration, observation and experiment.

1. An area of about ten acres on the campus has been set apart to the Department of Agriculture in order that the professor may have close at hand a plat of ground sufficient to illustrate, in connection with the lectures, all the processes of seed-growth, etc.

Dairying will be installed on this area on the campus, and Veterinary Science will also be introduced.

2. The Philosophical Hall has been turned over to the Department of Agriculture for the lecture room and Agricultural Museum. A full exhibit of fruits, of agricultural products, of fertilizers, of models, etc., will be made.

3. The University farm, situated beyond the corporate limits of the city of Athens, will be used to illustrate horticultural and agricultural processes on a larger scale.



GEORGIA SCHOOL OF TECHNOLOGY, ATLANTA, GA.

EXPENSES FOR THE FULL COURSE.

No tuition fee is charged residents of Georgia.

The following estimate of expenses includes all necessary items except clothing and railroad fare:

	Low.	Liberal.	Very Liberal.
Matriculation fee.....	\$ 10 00	\$ 10 00	\$ 10 00
Library fee.....	5 00	5 00	5 00
Initiation fee to Literary Society	2 00	2 00	2 00
Board.....	72 00	108 00	144 00
Fuel, room-rent, lights and attendance.....	13 00	37 00	60 00
Books and stationery	8 00	10 00	12 00
Furnishing room in dormitory	6 00		
Laundry	9 00	12 00	14 00
	\$ 125 00	\$ 184 00	\$ 247 00

Each student, unless excused from drill because of physical disability, is required to purchase a uniform. The cost of this is \$16.00.

The figures above given are for the Freshman Class, which is more expensive than subsequent years. They are based upon the actual experience of a large number of students. Expenses are frequently brought under the lowest estimate by strict economy. Second-hand books can be purchased at low rates, and it is often possible to purchase at greatly reduced prices uniforms which have been used but little. In this and other ways money can be saved, and cases are known to the faculty where students have spent less than one hundred dollars during the entire season.

EXPENSES FOR THE SHORT COURSE.

No matriculation or other fee is charged. Board can be had in the new Students' Boarding Hall, which is admirably conducted as a co-operative students' enterprise, under the charge of Prof. O. M. Snelling, at \$7.50 to \$8.00 per month.

FURTHER INFORMATION.

All persons interested are requested to write for catalogues or further information to the chancellor of the University at Athens; also to send the names of sons of farmers and others who may be interested in either of the courses above outlined. Circulars, etc., will be sent to all those whose names are thus supplied. Address

WALTER B. HILL, Chancellor,
Athens, Ga.

The following institutions have been established by the State and made branches of the University: The North Georgia Agricultural College at Dahlonega, Georgia School of Technology at Atlanta, Georgia Normal and Industrial School at Milledgeville, Georgia State Normal School at Athens, Georgia State Industrial School for Colored Youths.

The North Georgia Agricultural College, which was opened in 1873, is located at Dahlonega. There are no elementary students. There are two sub-Freshman classes, which prepare students for the four college classes at Dahlonega or for the University at Athens.

The Georgia School of Technology is located at Atlanta. It offers an education of high grade, founded on Mathematics, the English Language, the Physical Sciences and drawing. Degrees are offered in Mechanical, Electrical, Civil and Textile Engineering. The workshop and the textile building are important features of this school.

The Georgia Normal and Industrial College is situated in Milledgeville. Its purpose is to provide for the young women of Georgia an institution in which they may be prepared to do intelligent work as teachers according to the best known methods, or to earn their own livelihood by the practice of some one or another of those industrial arts suitable for females to follow. It also gives a full classical education.

The Georgia State Normal School was first organized in Athens in 1892 as a summer school. It was permanently organized in April, 1895, and is devoted entirely to preparing teachers for work in the common schools of Georgia. It has eight departments: Civics, Latin, Elementary Science, English, Mathematics, Geography and History, Pedagogy, Free-hand Drawing and Penmanship, and a Model School for observation and practice.

The Georgia State Industrial College for Colored Youths was established by the State near the city of Savannah in 1890, for the purpose of furnishing a liberal and industrial education to colored youths. It is supported by an annual appropriation from the State and an appropriation by Congress under the Morrill Act, approved 1890. Its location is southwest of the city, about five miles from the courthouse and not far from Thunderbolt.

The following institutions are affiliated with the university, but do not now receive State funds: The South Georgia Military and Agricultural College, Middle Georgia Military and Agricultural College, and West Georgia Agricultural and Mechanical College.

The South Georgia Military and Agricultural College is located at Thomasville, and was opened in 1879.

The Middle Georgia Military and Agricultural College is located at



NORTH GEORGIA AGRICULTURAL COLLEGE, DAHLONEGA, GA.

Milledgeville. The old State capitol buildings and grounds were granted to the trustees of the State University for the purpose of establishing this college, which was opened in 1880. Military exercises form a part of the course of instruction and cadets are required to wear a uniform. A commercial course is provided for students desiring to fit themselves for business life.

The West Georgia Agricultural and Mechanical College is located at Hamilton, and was opened in 1882. The building is large and commodious with large study rooms and a spacious chapel.

The basis on which the State University is built is Franklin College, in its earliest years the only department of the university. It is still the chief classical school of this great institution. Before the days of free tuition it admitted "fifty meritorious young men of limited means" without charge, and also young men studying for the ministry of any denomination who stood in need of such aid. There are in the university library at Athens many thousand choice volumes, of which about 1,000 were the gift of Hon. George R. Gilmer, for four years governor of the State. There are also several thousand volumes in the libraries of the two literary societies of the University at Athens. Another department of the University at Athens is the Law School, presided over by an able faculty.

OTHER NOTED COLLEGES.

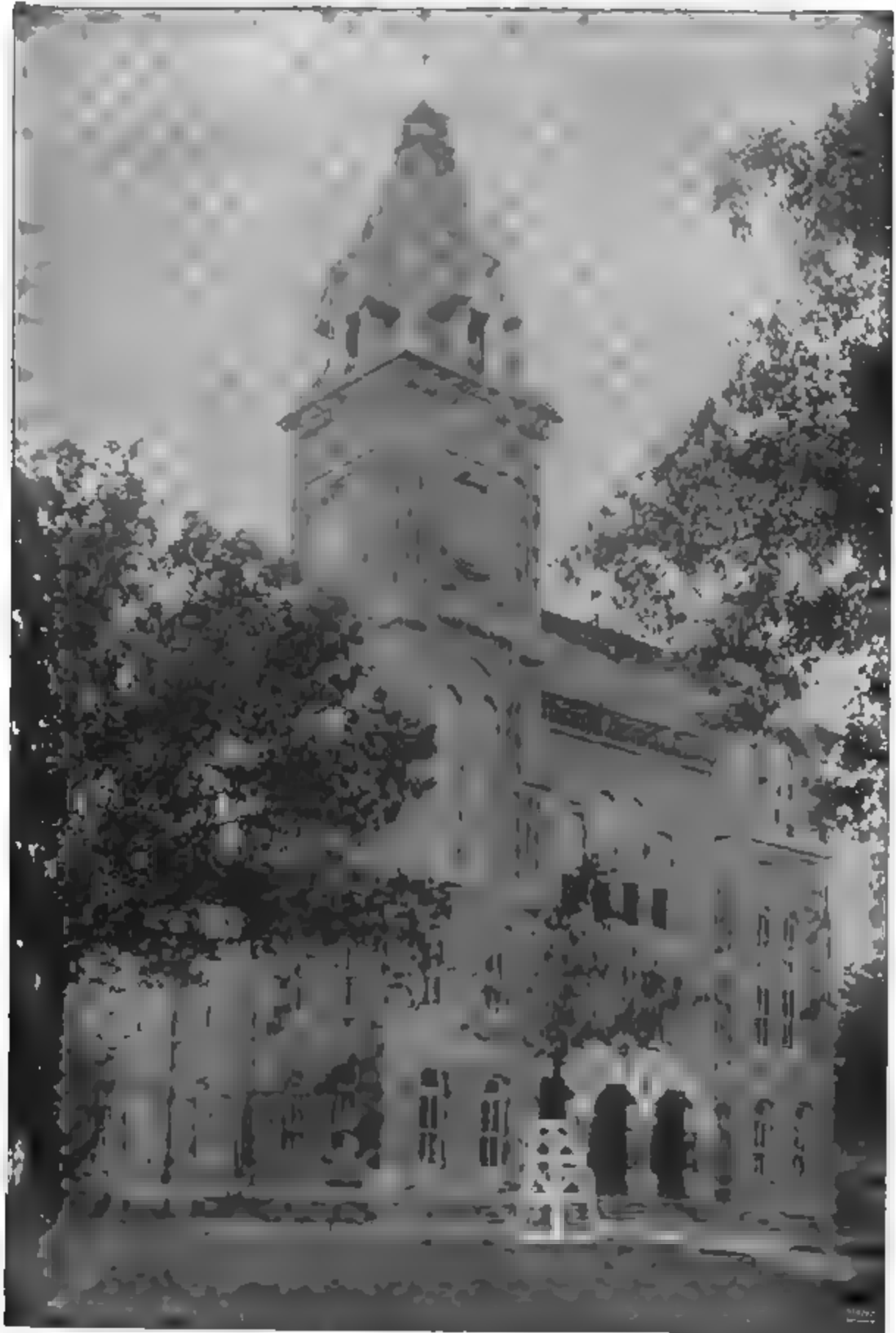
Emory College at Oxford, in Newton county, is the joint property of the North Georgia, South Georgia and Florida conferences of the Methodist Episcopal Church, South. It was chartered December 29, 1836, and the first class was graduated in 1841. The college has from time to time, received gifts of money, specimens for its mineral cabinet and books for its library, which contains twenty thousand choice volumes. Each of the two literary societies has about three thousand volumes in its library. One of the early donations to the college was a fund of \$5,000, given by Mr. George W. Williams, a Georgian, who moved to Charleston, South Carolina, and became one of the prosperous merchants of that city. During the presidency of Dr. Atticus G. Haygood Mr. George I. Seney, of New York, made to Emory College a gift of \$125,000, part of which was expended in the erection of the building known as Seney Hall, and part added to the endowment of the college. Under the presidency of Dr. W. A. Candler, the sum of \$100,000 was added to the endowment, of which Mr. W. P. Pattillo, of Atlanta, gave \$25,000. The handsome new library building, known as Candler Hall, was erected at a cost of \$25,000. It has ample room for 75,000 volumes.

The founder and first president of the college was Ignatius A. Few. Three of its presidents, Drs. George F. Pierce, Atticus G. Haygood and Warren A. Candler, were elected bishops of the Methodist Episcopal Church, South. This institution bears a high reputation for its thorough instruction, and for making higher education possible to young men of limited means through its helping halls, loan fund and other agencies. There is connected with the college a school of law, presided over by Judge Capers Dickson. There is also a department of Pedagogy. The mineral cabinet is very large, containing thousands of specimens collected during the last fifty years. The museum contains an interesting collection of objects of historical interest.

Mercer University, located at Macon, the "Central City" of Georgia, is under the control of the Georgia Baptist Convention. At its organization in the town of Penfield in 1838 it was called Mercer Institute. Its curriculum was soon after extended and its name was changed to Mercer University. In 1870 it was removed to Macon, new and handsome buildings were erected, and its entire equipment was greatly enlarged and improved. The libraries of the university and of the two literary societies contain many thousands of well-selected volumes. In addition to a regular collegiate course there is connected with this institution a school of law, presided over by Judge Emory Speer. Important feeders of the University are Mercer High School at Penfield and Crawford High School at Dalton. The university has in all ten buildings. The main building, which is four stories high, was erected at a cost of \$100,000. In this is the president's residence and office, several lecture rooms, the geological museum, chemical laboratories, apparatus rooms, the literary society halls and their libraries. The chapel building, also four stories high, has six large lecture-rooms, also the biological museum and laboratory. In the rear of this building and forming a part of it is the chapel, capable of seating eight hundred people. In the rear of the chapel and connected with it is the university library with a capacity of 20,000 volumes. There is also the gymnasium, a large, new brick building. There are two boarding halls and six frame dormitories for students.

There is a fund for the education of young ministers of limited means. There is also a loan fund secured through a bequest of the late M. Aquilla Cheney, supplemented by gifts of other friends of the college.

The Wesleyan Female College at Macon enjoys the high honor of being the first college in the world chartered for the express purpose of bestowing diplomas upon ladies. It is the property of the North and South Georgia and Florida Conferences of the Methodist Episcopal Church, South. It was chartered December 10, 1836, as the Georgia



SENEY HALL, EMORY COLLEGE, OXFORD, GA.

Female College, and was built by general subscription, Methodist ministers acting as agents for the collection of the necessary funds. Its first president was Dr. George F. Pierce, afterwards a bishop of the Methodist Episcopal Church, South. The first class was graduated in 1840. A mortgage of ten thousand dollars against the college was paid off in 1845 by James A. Everett of Houston county, who then presented the property to the Georgia Conference of the Methodist Episcopal church, South, by whom its present name was conferred upon it. In 1881 Mr. George I. Seney, of New York, donated to it \$50,000 which he afterwards increased to \$125,000. Most of this donation was expended on the enlargement of the college building. About \$35,000 of it forms a permanent endowment of the college. This enlargement of the college occurred during the presidency of Dr. W. C. Bass, who was for more than thirty years identified with the work of the college, first as a professor, and for more than twenty years as president. The Seney gift was bestowed through the influence of Dr. Atticus G. Haygood, at the time president of Emory College and subsequently bishop of the Methodist Episcopal Church, South. In 1894-95 a well-equipped chemical laboratory for practice work was added through money raised by the efforts of Professors Charles O. Townsend and Joseph T. Derry. In 1900 a handsome brick building, four stories high and complete in all its appointments, was erected at a cost of \$25,000 and named by the trustees "Roberts Hall" in honor of Dr. J. W. Roberts, president of the college, to whose management the Institution is largely indebted for its recent rapid advancement. The lower floor is taken up by seven rooms for the Science Department, which is up-to-date in all its appointments. Its new chemical laboratory, physical apparatus and mineral cabinet have been well arranged by the head of the Science Department, Professor W. B. Bonnell.

The Shorter Female College at Rome was organized in 1873 as the Cherokee Baptist Female College. In 1877 the property was purchased by Colonel Alfred Shorter of Rome, who determined to use his money for the equipment and endowment of a first-class college for young ladies. He accordingly employed a skillful architect and erected three large buildings, equipped them with the necessary apparatus, and liberally endowed the institution. He then presented the property to the Baptists of Georgia as a "gift to our daughters," to be used exclusively as a college for young ladies. This institution rightly bears the name of the noble-hearted gentleman who was its greatest benefactor. In all the South there are no more beautiful school edifices than the graceful buildings crowning a lofty eminence in the city of Rome. The college

possesses a fine equatorial telescope, and excellent chemical and biological apparatus. It also has a large and finely equipped gymnasium.

The Agnes Scott Institute at Decatur, eight miles east from the city of Atlanta, began its career in a rented building, September, 1889, under the auspices of the Decatur Presbyterian Church. In the following spring Colonel George W. Scott, an elder of the church, purchased five and a half acres and proposed to provide a permanent home for the school. His first gift was \$40,000, which, by the time the work was completed, he had increased to \$112,500. For this splendid property Colonel Scott delivered deeds to the board of trustees, and in the presence of the Synod of Georgia it was dedicated to the cause of the Christian education of young women, November 12, 1891. The trustees, in recognition of Colonel Scott's noble gift, gave to the institution the name of his mother, Agnes Scott. He has since given to this college \$8,000 more, making his total gift \$120,000.

The Lucy Cobb Institute, located at Athens, was first opened to the public in 1858. This flourishing ladies' college was founded through the efforts of General Thomas R. R. Cobb. Just about the time of the opening of the school, Lucy Cobb, eldest daughter of General Cobb died, and the trustees unanimously decided to name the new college in honor of her, the daughter of its founder. The main building is a convenient and elegantly arranged home for young ladies. When the necessity arose for a new college chapel, many contributions were made by friends in Georgia and elsewhere, of from five to five hundred dollars. General Henry R. Jackson, of Savannah, Georgia, was one of the most liberal contributors. As more money was still needed, one of the young lady pupils wrote a beautiful and girlish letter to Mr. George I. Seney, of New York, whose gifts to Emory and Wesleyan Colleges had made his name familiar in Georgia. He responded with a liberal gift, and Seney-Stovall chapel stands as a monument to the noble gentleman of New York and fair daughter of Georgia.

The Southern Female College (Cox College) for young ladies is a Baptist institution located at College Park, about eight miles southwest from Atlanta. The buildings are elegant and are furnished with all modern conveniences. They are also fully equipped with the apparatus deemed necessary for a first-class college.

The Southern Female College at LaGrange is the property of the Baptist denomination. It was organized in 1843, and has always enjoyed a fine reputation. The old college buildings have been lately replaced by elegant new ones of modern style and are well equipped for college work.



MERCER UNIVERSITY, MACON.

The LaGrange Female College began its existence as the LaGrange Female Academy in 1833. In 1836 it was chartered as the LaGrange Female Institute. In 1852 its charter was amended and it became LaGrange Female College. It is the property of the North Georgia Conference of the Methodist Episcopal Church, South, having been tendered to the conference and accepted in December, 1867. It is among the most noted of the educational institutions of Georgia.

Andrew Female College at Cuthbert, which is the property of the South Georgia Conference of the Methodist Episcopal Church, South, was established in 1853. It has ever since its foundation been doing a good work for the young ladies of that section of the State. A large new building will soon be added to the equipment of the college.

The Monroe Female College at Forsyth was chartered in 1849, and in 1850 was opened to the public. It is held in high esteem, and its handsome buildings are an ornament to the thriving and pretty town in which it is located. This school is under the auspices of the Baptist denomination. Two commodious buildings have been recently added to the equipment of this institution.

Young Female College at Thomasville was established in 1868 by Major E. R. Young, who donated for that purpose the sum of \$30,000.

St. Stanislaus College was first organized under the name of Pio Neno Colege, mainly by the efforts of Right Reverend William H. Gross, Roman Catholic Bishop of the diocese of Georgia. It is located at Vineville, near Macon, and is a training school for priests.

Young L. Harris Institute was founded through the liberality of Mr. Young L. Harris of Athens, who presented the property to the Methodists of Georgia. It is a college for young ladies and young men, and is doing a noble work.

The Brenau Female College at Gainesville is the outcome of an institution founded by Dr. W. C. Wilkes and a board of trustees in 1878, called at first the "Georgia Baptist Seminary for Young Ladies." In 1886 the property was bought by Prof. A. W. VanHoose who, in 1893, formed a partnership with Prof. H. J. Pearce of Columbus, Georgia. These two gentlemen have built up a first-class college which was their own property until 1900, when they sold an interest in it to Dr. M. M. Riley of Greenville, S. C. The name of the college was changed soon after Professor Van Hoose took charge of it to the Georgia Female Seminary and Conservatory of Music. Brenau is the name just adopted for this institution with its grealy enlarged facilities.

The Piedmont Institute at Rockmart, founded in 1889, is doing

a fine work for the boys and girls of Northwest Georgia. It is the property of the North Georgia Conference of the M. E. Church, South.

The South Georgia College at McRae, the property of the South Georgia Conference of the M. E. Church, South, is also doing good service in the cause of education.

For the Colored people of Georgia there are also several institutions.

The Atlanta University for the education of negroes was established in 1867 by the Freedmen's Bureau and various Northern Aid Societies, the chief of which was the American Missionary Association.

Clark University at Atlanta was chartered in 1887 for the same purpose.

The Georgia State Industrial College for Colored Youths at Savannah has already been mentioned as a department of the State University, supported by the State.

Payne Institute at Augusta, is a school for the colored people under the auspices of the M. E. Church, South.

Other institutions for the education of the negroes are:

Spellman Seminary, Morris Brown College and Gammon University, all in Atlanta.

In addition to the institutions of learning before mentioned, Georgia has many schools enjoying a fine reputation. Two of the oldest schools in the State are the Chatham Academy of Savannah and the Academy of Richmond county, in Augusta, each dating back to old colonial days. Both of these are now part of the public school systems of their respective cities.

PUBLIC SCHOOLS.

Last, but not least, is the great public school system of Georgia. The State Constitution of 1868 made provision for "a thorough system of general education, to be forever free to all children of the State." At a meeting of the Georgia Teachers' Association held in Atlanta in August, 1869, a committee was appointed to report upon a school system adapted to the condition and wants of Georgia. The committee consisted of Professor Gustavus J. Orr, for many years professor of Mathematics in Emory College, chairman; Bernard Mallon, long the superintendent of the public schools of Savannah, and afterwards of Atlanta; John M. Bonnell, then president of Wesleyan Female College at Macon; Martin V. Calvin of Augusta, and David W. Lewis, president of the North Georgia Agricultural College at Dahlonega. By direction of the committee the chairman prepared the report, which was then submitted to the exe-



WESLEYAN FEMALE COLLEGE, MACON, GA.



cutive committee composed of Rev. H. H. Tucker, at one time president of Mercer University and later of the State University; Prof. W. Leroy Browne of the State University; Rev. Alexander Means, D.D., long a professor in Emory College; Professor W. D. Williams, principal of the Georgia Academy for the Blind; Professor Bernard Mallon, and Professor Gustavus J. Orr. After nine hours spent in discussing the report, section by section, it was adopted as written. At another meeting of the Georgia Teachers' Association, held at Macon in November, 1869, the report after being discussed for an entire day was unanimously adopted.

That report forms the main provisions of the first public school law, approved October 13, 1870. Under this act an organization was effected, and Governor R. B. Bullock appointed General J. R. Lewis State School Commissioner. This office has since been held by Professor Gustavus J. Orr, Hon. J. S. Hook, Professor S. D. Bradwell and Professor G. R. Glenn.

It is appropriate to state in this connection that at a meeting of the National Educational Association, a committee raised for the purpose of forming an ideal school system for a State, and composed of some of the ablest educational men of the Union, with the school laws of all the States before them, in their report followed to a remarkable extent the public school law of Georgia.

The system of common schools, though organized in 1870, did not really go into effect until 1873. There was a common school commissioner, and a tax for the support of schools had been levied and collected. Schools had been put into operation in some counties and teachers employed; but at the close of 1871 more than three hundred thousand dollars was due to school officers and teachers for services rendered. There was nothing with which to pay them; for, in violation of the Constitution of the State, the fund of \$327,000 had been appropriated to the payment of legislative and other expenses of the government. In vain did teachers and school officers clamor for their pay, for there was nothing to the credit of the school fund in the treasury.

It was feared that the system had received a fatal blow in the very first years of its existence. No schools were taught in 1872, and the commissioner devoted his attention to systematizing the work under the law passed in August of that year. The legislature of 1872 provided for the levying of a tax for the purpose of paying the claims of teachers and school officials. Under the operation of this law the debts were finally paid. In 1873 the schools were again put in operation, and have increased in number and efficiency from that day to this. From the time of Governor Smith's induction into office in 1871 to his retirement in

1877, the amount of \$1,271,368 was raised for the support of the public school system, out of which the debts to teachers and school officers were paid, besides meeting promptly the expenses of running the schools.

In 1871 the total attendance on the public schools of Georgia was 49,578, and in 1876 it was 179,405. For the year 1877 Professor Orr, the State School Commissioner, reported the attendance on the public schools to be in round numbers 200,000.

The report of Commissioner G. R. Glenn for the year 1899 showed a total enrollment of 416,352 pupils in the public schools of Georgia. Of this number 247,912 were white and 168,440 were colored.

The amount apportioned and paid for the support of the public schools in Georgia for 1900 is \$1,440,642. To this should be added \$400,000 paid by local city and county appropriations.

By a school census taken by the State School Commissioner in 1893 it was ascertained that the number of children in Georgia between the ages of ten and eighteen, who were unable to read and write, was 114,527. Of this number 35,638 were white, and 78,884 were colored. A similar census in 1898 showed the number unable to read and write between the ages of ten and eighteen to be 83,616. Of this number 22,917 were white and 60,699 were colored. This shows a gratifying decrease in the number of illiterates in Georgia. From the report of Commissioner Glenn rendered October 1, 1900, it appears that there were in Georgia 5,866 white teachers and 3,113 colored, a total of 8,979. The number of pupils enrolled during the year was 251,093 whites and 172,374 colored. The average daily attendance was 151,341 whites, about 60 per cent. of the enrollment; and 101,852 colored, or about 59 per cent. of the enrollment.

Among other prominent schools of Georgia are: Douglasville College, Douglasville; J. S. Green College, Demorest; Martin Institute, Jefferson; Wynton Male and Female College, Columbus; South Georgia Male and Female College, Dawson; Gordon Institute, Barnesville; Dalton Female College, Dalton; Monroe Female College, Monroe; South Georgia College for both sexes, McRae; Chappell Female Institute, Columbus; Georgia Military Academy, College Park; New Ebenezer College, Cochran; Hiawassee High School and the North Georgia Baptist College, at Morganton.

The following tables give valuable information concerning schools of all kinds in Georgia :



SHORTER COLLEGE, ROME, GA.

TABLE 1.

SCHOOLS BELONGING TO THE PUBLIC SCHOOL SYSTEM OF GEORGIA.

NUMBER OF TEACHERS.

WHITE.			COLORED.			TOTAL.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Grand Total.
2851	8015	5866	1317	1796	3113	4168	4811	8979

GRADES OF TEACHERS.

FIRST GRADE.			SECOND GRADE.			THIRD GRADE.		
White.	Colored.	Total.	White.	Colored.	Total.	White.	Colored.	Total.
2970	417	3387	1594	886	2480	983	1661	2644

Number of normal trained teachers—White, 1277; colored, 841; total, 1618.
SCHOOLS—Number of white schools, 5045; colored, 2710; total, 7755.

ENROLLMENT.

Number of pupils admitted during the year:

WHITE.			COLORED.			TOTAL.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Grand Total.
129778	121315	251093	81486	90888	172374	211264	212203	423467

ATTENDANCE.

Average number of pupils in daily attendance:

WHITE.			COLORED.			TOTAL.		
Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Grand Total.
76067	75274	151341	47024	54828	101852	122463	180102	253198

MONTHLY COST—Average monthly cost per pupil.....\$1 18
Amount of average monthly cost paid by the State..... 96

TABLE 1—Continued.

TEACHERS' SALARIES.

Average monthly salaries paid teachers:

FIRST GRADE.		SECOND GRADE.		THIRD GRADE.	
White.	Colored.	White.	Colored.	White.	Colored.
\$ 35 31	\$ 25 80	\$ 26 30	\$ 20 76	\$ 20 70	\$ 16 65

Number of visits made by the commissioners during the year.....	9,883
Number of schoolhouses in the State belonging to the county boards of education, 5,779; value	\$1,430,288 48
Number of schoolhouses in cities and towns not belonging to the county boards, 527; value.	1,868,284 00
FINANCIAL STATEMENT—Receipts for the year:	
Balance in hand from 1898.....	42,423 20
Amount treasurer's quarterly checks.....	1,284,885 30
Amount from any and all other sources, including supplemental checks	150,959 03
Total receipts.....	1,462,267 53
EXPENDITURES:	
Salary of county school commissioners.....	62,074 50
Salary of members of boards of education.....	10,827 41
Postage, printing and other incidentals..	16,282 97
Amount expended in the purchase of school supplies and buildings.....	71,628 67
Amount paid to teachers	1,235 868 86
Total	1,896,681 91
Balance remaining on hand	65,585 62
Total amount of salaries credited to teachers during the year, as per itemized statements.....	1,318,512 25
Number of school libraries, 183; value, \$32,802.31.	

TABLE 2.

ENROLLMENT IN PUBLIC SCHOOLS UNDER LOCAL LAWS.

Pupils in Schools for Whites.	Pupils in Schools for Negroes.	Total.
85,856	23,340	59,196

From the total should be deducted 8,202 already counted in the county schools.

TABLE 3.

PUPILS ENROLLED IN PRIVATE HIGH SCHOOLS AND COLLEGES.

In those for Whites.	In those for Negroes.	Total.
10,097	4,877	15,974

All these tables are made up from the report of the State School Commissioner, G. R. Glenn, submitted on October 1, 1900.



STATE SANITARIUM, MILLEDGEVILLE.

CHAPTER XIV.

BENEVOLENT INSTITUTIONS OF GEORGIA.

"Not for themselves, but for others" was the motto of the founders of Georgia, who gave their time and money for promoting the welfare of those who needed help, expecting no other reward than that which arises from the consciousness of duty well-performed. It is not strange, then, that the first benevolent institution of Georgia had its birth in the early days of the colony. This was Whitefield's Orphan House at Bethesda, about nine miles from Savannah, founded in 1739. The building was erected by funds collected through the untiring efforts of the distinguished minister in whose honor it was named. Of this noble enterprise Mr. Whitefield said, "Some have thought that the erecting such a building was only the product of my own brain; but they are much mistaken; for it was first proposed to me by my dear friend, the Rev. Mr. Charles Wesley, who, with his excellency General Oglethorpe, had concerted a scheme for carrying on such a design before I had any thoughts of going abroad myself." This giving of due credit to others adds to the honor of the founder and first superintendent of the Orphan House, which he called Bethesda, "because," said Mr. Whitefield, "I hoped it would be a house of mercy to many souls." And such it has been, and is still. It is a home for boys and is conducted under the auspices of the Union Society, which last year (1900) celebrated its 150th anniversary.

The State Lunatic Asylum, near Milledgeville, is one of the noblest charities of the "Empire State."

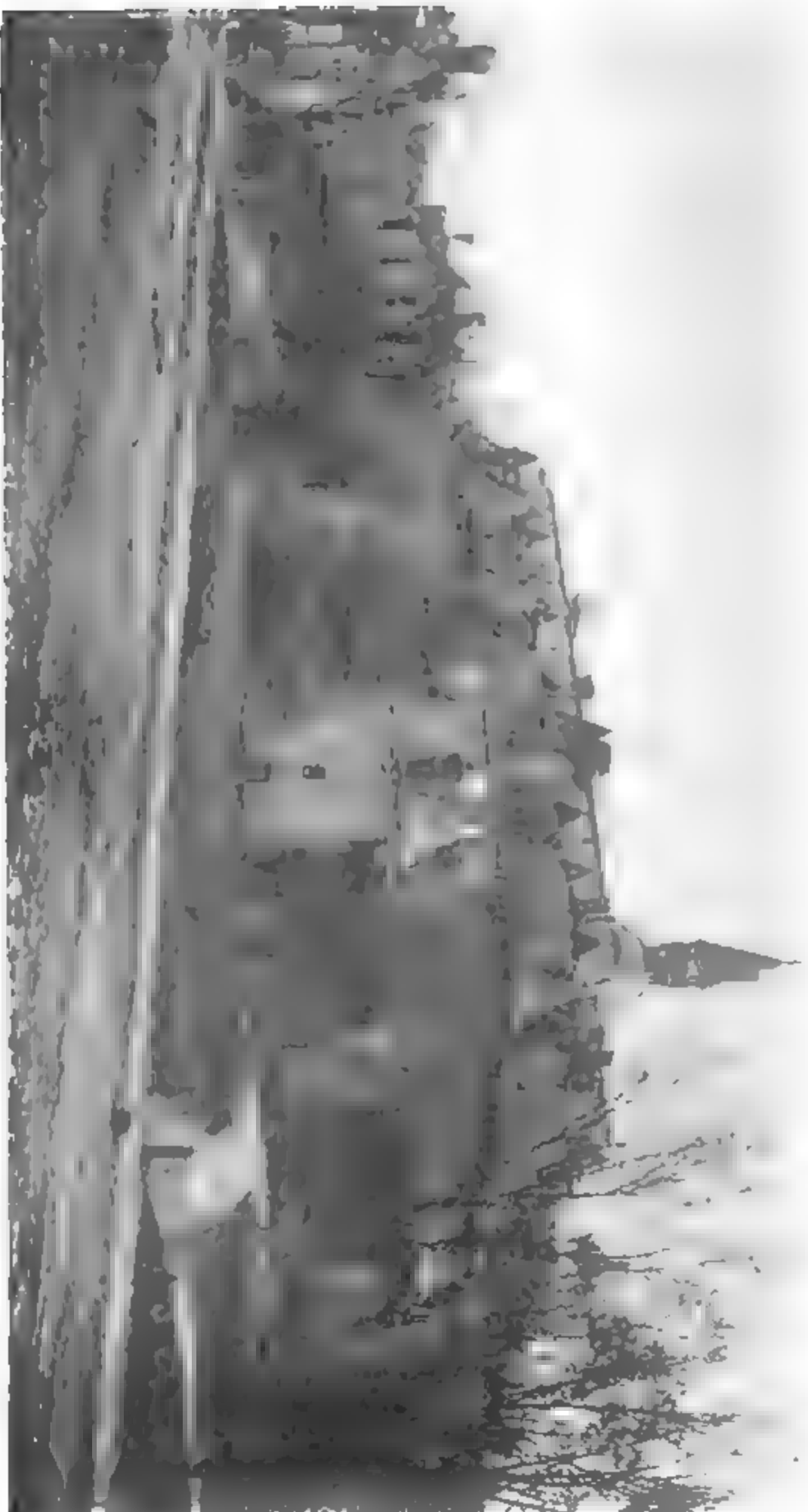
In 1837 the Georgia legislature made an appropriation and appointed a commission for the purpose of establishing a lunatic asylum. The commission bought for a small price 40 acres of pine land two miles from Milledgeville, located on a high hill commanding a fine view of the town and the intervening country. In December, 1842, the building was completed and the first patient was admitted. At first the counties had to pay the expenses of their pauper patients, and the friends of patients who were able to pay had to provide for their maintenance in the asylum. This plan was changed to State care of the pauper insane about 1846. Up to 1877 patients were received from other States. At that time, on ac-

count of the overcrowded condition of the institution, the General Assembly was obliged to pass an act sending all patients not citizens of Georgia to their respective States. During the same year an act was passed making the asylum free to all *bona fide* citizens of Georgia. By the same act it was provided that friends could deposit with the steward funds for extras to be used by the patients individually, but no part of this was to go to the support of the institution. The first superintendent was Dr. David Cooper, elected in 1843. Three years later Dr. Thomas F. Green, a man of kindly nature, genial manner, and of great enterprise and energy was elected. He succeeded in obtaining appropriations year after year, in making improvements and in securing a suitable corps of attendants. He remained in charge of the asylum until 1879 when in a peaceful old age and still possessed of all his faculties, he suddenly expired. He was succeeded by Dr. T. O. Powell who had been associated with him for nearly twenty years.

In 1847 the legislature added another building to the original one, and the female patients were placed in the new building. White attendants were also substituted for negroes, who had formerly discharged this duty. In 1849 plans were approved by the legislature for greatly enlarging the asylum accommodations. The legislature appropriated \$10,500, and in 1851 added \$24,500 for a large and handsome new building. To this the original buildings were to be wings. Additional appropriations were made as follows: \$56,500 in 1853; \$110,000 in 1855; \$63,500 in 1857, and \$30,000 in 1858, in which year the building was completed.

The building is supplied with every convenience for the comfort of the patients and of the officers and their families. In 1870 and 1871 another appropriation of \$105,855 was voted for enlarging the main building. In 1881, at the urgent solicitation of the board of trustees, the legislature appropriated \$165,000 for the erection of two separate buildings for white convalescents, one for males, the other for females. In 1883 an additional appropriation of \$92,875 was made, and in 1893 the legislature voted \$100,000 more for the erection of additional buildings for white and colored insane.

The emancipation of the negro population in 1865 necessitated asylum accommodations for the insane of this race. In 1866 the legislature appropriated \$11,000 for an insane asylum for negroes. This building was enlarged in 1870 at an expense of \$18,000. In 1879 the legislature appropriated \$25,000 more for the same purpose, and in 1881 the sum of \$82,166 for a new building and heating apparatus for the insane of the colored race. Of course the erection of all these large buildings required much more land than was embraced in the original



GEORGIA SCHOOL FOR THE DEAF, CAVE SPRING, GA.

purchase. The institution now has 3,000 acres in one body. The asylum has its own water works, the water being furnished from a bold stream on its own grounds. It has also a well 960 feet deep, much of it through solid rock. With the exception of the capitol in Atlanta, the center building of the asylum is the handsomest edifice in Georgia. About a mile from the asylum proper is the hospital for the treatment of contagious diseases. The total cost of the land and buildings is more than one million dollars.

Georgia Institute for the Deaf and Dumb. At the beautiful town of Cave Spring, not far from the city of Rome, in a charming valley between mountains and hills, stand the commodious and substantial buildings of the Georgia Institution for the Deaf and Dumb. No more appropriate location for such an institution could be found. The legislature of the State has at different times made liberal appropriations for the education of the deaf and dumb. Before Georgia had an institution of her own for this purpose a commissioner was appointed to receive application in behalf of indigent deaf and dumb residents of the State, and to make all necessary arrangements for conveying them to the American Asylum at Hartford, Connecticut. For this purpose the sum of \$3,000 was appropriated. Later the State made an arrangement for educating deaf mutes at the Hearn Manual Labor School, at Cave Spring, in Floyd county, Georgia. In 1847 the legislature passed an act authorizing the governor to appoint five commissioners, whose duty it should be to make all necessary arrangements for the erection of an asylum for the deaf and dumb. In 1849 the necessary buildings had been provided, and the institution was opened for pupils in July. Here deaf and dumb children and some of more advanced years have been taught by the most approved methods. The first building, of brick, was erected in 1849. In 1850 an easterly extension was added, and in 1875 another on the south. A shop two stories high was also erected. Another brick building, known as the storeroom was erected in 1878, and in 1882 the north extension to the main building was added for the use of the principal and his family. During this same year a department for negro deaf mutes was opened in a building of brick, purchased for the purpose and located about 250 yards from the dormitory building for whites. In 1885 the present handsome school building was begun. It was completed and occupied in 1889. In 1887-88 the dormitory was enlarged by putting upon it a handsome mansard roof. In 1890 an engine-house and laundry were added with all necessary appliances, also a 500-gallon steam pump. Six-inch water mains were laid, with ten Ludlow fire plugs conveniently located; hose carriage and 700 feet of fire department hose were purchased and

steel stair fire-escapes were erected where needed. In 1894 a new and handsome building was erected for shop purposes. This building has been equipped for a general line of wood-working; also a well-arranged printing office; a shoe shop; a blacksmith shop and wood-carving department. In 1897 the sum of \$7,000 was spent in electric lighting and in steam heating. There is also a well-equipped art studio in the school building. The buildings are situated in the eastern part of the town of Cave Spring and command a fine view of Vam's Valley and its picturesque scenery.

The Academy for the Blind is another of the institutions of Georgia established and supported by the State. It is located in the city of Macon on College Hill. This institution was incorporated by act of the legislature, January 2, 1852. It originated in a movement made by the citizens of Macon at a meeting called for this purpose on April 15, 1851. Mr. W. S. Fortescue was the first principal, and Miss Hannah Guilan was assistant teacher. For the years 1852 and 1853 the legislature appropriated \$5,000 per annum to aid in the support of the institution. On February 18, 1854, the legislature appropriated \$10,000 for the erection of a suitable building. Further appropriations were made and in 1860 the main building facing Orange street was completed at a total cost of \$65,000. The average of the annual appropriations up to 1876 was about \$13,000. For the year ending October 1, 1899, the appropriation from the State was \$18,500. Additions were made to the main building in 1893, and a handsome boy's dormitory was added several years later. The entrance to this is from College street. A two-story brick building in which are the workshops faces Orange street. In 1882 a department for the colored blind was opened and a large and comfortable brick building facing Madison street was erected. This is under the same management as the white department, but the two are on lots distant from each other. In August, 1858, Professor W. D. Williams was elected principal and retained this office until his death, December 20, 1898. His son, Dudley Williams, was elected his successor, and upon his resignation in 1901 was succeeded by Mr. T. U. Conner.

The Female Asylum at Savannah is one of the oldest of the benevolent institutions of Georgia. On the 17th of September, 1801, several of the prominent ladies of Savannah met for the purpose of organization, and Mrs. Ann Clay was called to the chair. Fourteen lady managers were elected, and the following officers of the asylum were chosen. Mrs. Elizabeth Smith, first directress; Mrs. Ann Clay, second directress; Mrs. Jane Smith and Mrs. Sarah Lamb, secretaries; Mrs. Margaret Hunter, treasurer.



ACADEMY FOR THE BLIND, MACON, GA.

This institution is supported by annual subscriptions and has received many valuable bequests. Its business is managed by a board of directors who meet once a month. A visiting committee is appointed to purchase the necessary food, such as groceries, and clothing. The house is under the direction of a matron, second matron and teacher.

The Augusta Orphan Asylum was incorporated in January, 1852. In 1855 a house was rented and placed in charge of a matron, and four orphans were admitted to the privileges of the asylum. Mr. Isaac S. Tuttle, who died December 12, 1855, bequeathed his home on Walker Street and other property amounting to \$50,000 for the use of the association. This gift, added to the annual income from 200 shares of Georgia Railroad stock, provided amply for the institution in its infancy. For seventeen years the Tuttle House was occupied as an Orphan home. On the 9th of January, 1859, Dr. George M. Newton, stepson of Mr. Tuttle, died leaving to the asylum property valued at \$200,000. In 1869 an eligible site between Harper and Boundary streets, near the western boundary of the city of Augusta, was selected, mainly through the influence of Dr. Lewis D. Ford, the second president of the association. An elegant home was here built by Mr. W. H. Goodrich after plans furnished by Mr. D. B. Woodruff. It was begun in December, 1870, and completed in December, 1873. In 1889 this building was destroyed by fire, but was rebuilt by Mr. Charles B. Allen, after plans furnished by Mr. Lewis F. Goodrich, the son of the builder of the old home. It was reoccupied by the children in December, 1890. There are connected with this institution a farm and dairy, which made for the year ending April 1, 1900, a net profit of \$2,636.77. More than \$1,400 of this came from the products of the dairy. These were.

5,023 gallons of milk at 20 cents a gallon	\$1,004 60
1,330½ pounds of butter at 30 cents a pound	399 15
68 loads of compost from cow yards at 50 cents a load.....	34 00

Total dairy products\$1,437 75

The farm supplied the following values at market prices:

Potatoes, corn and other vegetables	\$503 25
578 watermelons at 5 cents each	28 90
1267 cantaloupes at 3 cents each	38 01

And the following field crops:

Oats, rye, vetch and green feed	98 00
25 tons of cured oats at \$15 a ton	375 00
15 tons of peavine hay at \$13 a ton	195 00
Corn and fodder	30 00

Total value of products\$2,705 91

Purchased during year seven cows	\$234 00	
Sold five cows	\$130 70	
Butchered four calves weighing 243 pounds at 12c. a pound....	29 16	
Sold one calf	5 00	\$164 86
	Debit	\$ 69 14
Debit		\$ 69 14
		<hr/> \$2,636 77

The larger boys of the home have their hours for school, for work on the farm, and for recreation. The girls have their hours for school, for work in the cutting, fitting and making department, and for recreation. They also take their turn at cooking and general housework.

The Orphan Home of the North Georgia Conference of the Methodist Episcopal Church, South, is located at Decatur, in DeKalb county, about eight miles from the city of Atlanta. It was founded in 1867. The plan was originated by Rev. Jesse Boring, M.D., and D.D. The home has no endowment and depends upon the voluntary contributions of the people. Yet it is well maintained, and additions are constantly being made to its equipment. The property consists of seven comfortable buildings, prettily situated, and a farm which raises produce for sale in the market after supplying the needs of the home. In addition to going to school the boys work on the farm, while the girls learn to sew, cook, wash and iron.

The Orphan Home of the South Georgia Conference of the Methodist Episcopal Church, South, is located in Vineville, a beautiful suburb of the city of Macon. It was organized June 12, 1873. It has a dairy and farm for the boys, and a cutting, fitting and making department for the girls, who also take their turn at cooking and general housework. The trustees intend adding other departments as they may be able. Of course all the children attend the school of the home. This institution was first founded as a private benevolent enterprise in 1857 by Mr. Maxwell of Macon. In 1873 it passed into the hands of the South Georgia Conference.

The Appleton Orphan Home at Macon is the property of the Protestant Episcopal Church, and was built through the liberality of Mr. Appleton of New York.

The Baptist Orphans' Home at Hapeville, eight miles from the city of Atlanta, is beautifully located in full view of the Central Railroad. There are three main buildings. The central one, known as the Administration Building, fronts the railroad. To the right with a front of 60

feet and a colonial piazza 40 feet in length, stands the Boys' Cottage, a brick building donated by Mr. F. S. Etheridge of Jackson, Georgia, in honor of his mother. On the opposite side of the lawn stands a similar cottage for the girls, costing the same money and modeled after the same plan, a gift of Judge James R. Brown of Canton, Georgia, in memory of his daughter, Sallie Rice Brown.

Besides attending school the girls are taught to cut and fit clothing, do mending and repairing, housework, washing and ironing; and the boys are taught to cultivate the fields, clean the premises, cut wood and make fires.

Within the past year \$500 worth of produce of the farm has been sold, this being the surplus left after supplying the wants of the orphanage.

The Hebrew Orphan Home is located in the city of Atlanta, under the auspices of the Hebrews of Georgia, and supported by their congregations in the State. The Abram's Home in Savannah, is one of their most noted benevolent institutions.

CHAPTER XV.

RELIGIOUS DENOMINATIONS OF GEORGIA.

When, on the 12th day of February, 1733, the first settlers under the lead of James Edward Oglethorpe landed at Yamacraw Bluff, they were accompanied by Dr. Henry Herbert, a clergyman of the Church of England. In March of the next year a body of Salzburgers from Germany landed at Savannah. At Ebenezer in Effingham county, they built the first Lutheran Church in Georgia. Of this church the first pastor was the Rev. John Martin Bolzius. In 1786 there were three Lutheran churches in Georgia, one at Ebenezer, one at Goshen and one in Savannah.

Rev. Henry Herbert, pastor of the Episcopal Church at Savannah, was succeeded by Rev. Samuel Quincy, and he was followed by John Wesley in 1736, and George Whitefield in 1738. Charles Wesley accompanied his brother John to Georgia. The two Wesleys and Whitefield are renowned as the founders of the powerful and influential body of Christians known as Methodists, though neither one of them ever separated himself from the Church of England, in which the three were ordained ministers. When in 1755 the trustees surrendered their charter to the crown and Georgia became a royal province, the Church of England (Episcopal), was declared to be the established church of the colony. Parishes were formed, in three of which were churches; one in Savannah, one in Augusta and one in what is now Burke county. The three counties of Chatham, Richmond and Burke were at that time known as Christ Church Parish, St. Paul's Parish and St. George's Parish. Part of what is now Chatham county was known as St. Philip's Parish. Outside of Savannah, the churches were supplied with missionaries sent out by the "Society for the Propagation of the Gospel in Foreign Parts." The Revolution caused a temporary abandonment of the field by the Church of England and, as far as can be ascertained, there was no organized Episcopal Church in Georgia for nearly twenty years after the establishment of independence. The first bishop of this church who visited Georgia was Bishop Dehon of South Carolina, who came in 1815, to consecrate the new building for Christ Church, where he confirmed a class of sixty. This was the first confirmation ever held in Georgia. In 1840 the Rev. Stephen Elliott was elected the first bishop of the diocese, which



NORMAL AND INDUSTRIAL SCHOOL AT MILLEDGEVILLE.



office he held until his death in 1866. He was succeeded by Rev. John W. Beckwith in 1867, upon whose death the Rev. Cleland Kinloch Nelson was elected bishop.

As early as 1735 a colony of Scotch Presbyterians settled at New Inverness, now Darien, in McIntosh county, at the mouth of the Altamaha river. Their pastor was Rev. John McLeod. The Independent Presbyterian Church of Savannah was organized about the year 1765. The first presbytery was held at Liberty Church in Wilkes county, March 16, 1797. The names of the ministers constituting it were John Newton, John Springer, Robert M. Cunningham, Moses Waddell and William Montgomery. The Synod of Georgia now embraces five presbyteries, extending over all sections of the State.

It has already been mentioned that John Wesley, the founder of Methodism came to Georgia, accompanied by his brother Charles in 1736, and that he was followed by George Whitefield in 1738. This may properly be regarded as the introduction of Methodism into America, although it was many years later when the church of that name was formally established on the Western Continent. Mr. Wesley used to refer to the coming of himself and brother and of Mr. Whitefield to America as the "second rise of Methodism." Georgia in her infancy had the ministry of John and Charles Wesley, Benjamin Ingham, George Whitefield, Delamotte and Cornelius Winter, men whose names are familiar in the early history of the Methodist movement. The Methodist Episcopal Church of America was organized in Baltimore in 1784 on account of the separation of the colonies from Great Britain. Mr. Wesley, acting in accordance with his views of church polity, ordained Dr. Thomas Coke as superintendent. He came to America and set apart Rev. Francis Asbury as superintendent or bishop of the Methodist societies in this country. In 1785 Methodist ministers entered Georgia at Augusta, coming from North Carolina and Virginia. Soon afterwards Georgia was included in the South Carolina Conference. The first circuit extended from the city of Savannah to Wilkes county. Among the most prominent pioneer preachers were James Foster, Thomas Humphries, John Major, Hope Hull, John Garvin, Stith Mead and Levi Garretson. As early as 1805 Dr. Lovick Pierce was an active itinerant Methodist preacher in Georgia. His son George F. Pierce, one of the most renowned pulpit orators of the world, became a bishop in the Methodist Church. In 1830 the Georgia Conference was formed. In 1840 the Methodist Episcopal Church in the United States divided into two general conferences. The church in the Southern States has since that time been known as the Methodist Episcopal Church, South.

By 1866 the Georgia Conference had become too large and was divided into the North and South Georgia Conferences.

The first Baptist in Georgia, of whom there is any account, was Nicholas Begewood, in 1757. This gentleman was an agent of Whitefield's Orphan House near Savannah. As far as has been ascertained, the first Baptist Church organized in Georgia was in 1772, at Kiokee Meeting-House, where Appling, in Columbia county, now stands, under the ministry of Rev. Daniel Marshall, at that time the only ordained Baptist minister in Georgia. In the year 1794 Messrs. Jonathan Clarke, George Mosse, Thomas Polhill and David Adams proposed the erection of a house of worship for the Baptists of Savannah, who at that time numbered not more than eight or ten. They were encouraged to take this step by Rev. Mr. Reese, a Baptist minister from Wales, who visited Savannah. Accordingly by the help of their Christian brethren of other denominations a Baptist Church was erected in 1795, under the superintendence of Ebenezer Hills, John Millen, Thomas Polhill, John Hamilton, Thomas Harrison and John R. Roberds, as trustees.

In 1796, as they had no pastor, they rented their church to the Presbyterians whose house of worship had been destroyed by fire. The Presbyterians occupied it for three years, when the Rev. Henry Holcombe became the pastor of the Baptist Church of Savannah. Under his ministry the membership was greatly increased. The Georgia Baptist Convention was organized in 1822 at Powelton, Hancock county. Rev. Jesse Mercer was Moderator of the first meeting of the convention. Other prominent ministers of this denomination of the early period were Edmund Bottsford and Silas Mercer.

There is another denomination whose members, like the Baptists, hold to immersion as the only method of Christian baptism, but who refuse to be called by any other name than that of Christians or Disciples. One of their founders was the pious and learned Alexander Campbell of Kentucky.

The Congregationalists, though few in numbers, are zealous and enterprising.

The Unitarians are not yet very strong in Georgia; neither are the Universalists.

The first Roman Catholic church established in Georgia was at Locust Grove in Taliaferro county, seven miles from Crawfordville, by a colony of Catholics from Maryland in 1794. Soon afterwards a number of Catholics who were refugees from the terrible massacres of St. Domingo, settled in Savannah and Augusta, and a priest, who came with them, went to Locust Grove. He was, as far as the record goes, the first Roman

Catholic clergyman that ever officiated as pastor of a church in Georgia. This State and the two Carolinas were subject to the See of Baltimore until July 11, 1820. At that time these three States were raised to a diocese by the appointment of Dr. John England, who was the first Catholic bishop of Charleston. There was at that time but one Roman Catholic Church with regular services in Georgia. That one was in Augusta—those at Locust Grove and Savannah being without pastors. Georgia was made a distinct diocese November 10, 1850, and Rev. Dr. Gartland was appointed the first bishop with residence at Savannah. He was succeeded after his death by Bishops Barry, Verot and Persico. On April 27, 1873, Rev. William H. Gross was appointed bishop.

The following statistical table of the leading Christian denominations in Georgia for the year 1900 will prove interesting and instructive:

BAPTIST CHURCH IN GEORGIA

	Church Buildings	Value	Ordained Preachers	Number of Members	Sunday Schools	Number of Pupils	Value of all Church Property.
White Baptists	2,089	.....	1,322	193,390	712	41,062	Over \$3,000,000
Colored Baptists	1,500	.....	1,000	175,000	500	25,000	About 900,000
Total	3,589	.....	2,322	368,390	1,212	76,062	\$3,900,000

METHODISTS IN GEORGIA

Methodist Episcopal Church, South.	Ordained Preachers			Number of Members	Church Buildings	Value	Parsonages	Value	Value of all other Church Property	Sunday-schools	Pupils
	Itinerant	Local	Total								
North Georgia Conference	276	299	575	99,000	771	\$ 1,091,780	176	\$ 223,485	\$ 867,424	740	50,924
South Georgia Conference	109	224	423	62,638	617	885,682	121	159,800	78,446	551	30,929
Total,	475	523	998	161,647	1,388	\$ 1,977,462	297	\$ 383,285	\$ 945,870	1,301	80,853
Methodist Episcopal Church (called in Georgia Northern Methodists)	29	41	70	3,460	77	52,107	10	4,000	.....	56	3,648
Colored M. E. Church of America (set off from the M. E. Church, South).	97	188	285	9,902	291	.....	12	.....	.....	.....	5,677
North Georgia Conference	197	295	492	14,459	691	.....	30	.....	.....	.....	7,440
South Georgia Conference	500	300	800	90,000	950	1,000,000	300	100,000	600,000	500	20,000
African M. E. Church. Protestant Methodists (estimated) .....	.....	.....	.....	3,400	.....	.....	.....	.....	.....	.....	.....
Total	1208	1347	2555	271,968	3,205	\$ 3,029,569	649	\$ 487,235	\$ 1,345,870	1,857	117,828

PRESBYTERIAN CHURCH IN GEORGIA

	Ordained Ministers.	Number of Churches.	Total Communicants.	Sunday-school Scholars.
White	110	211	16,138	10,346
Colored	28	26	1,892	2,253
Total	138	237	18,030	12,599

The Presbyterians have much valuable Church property ; but the exact figures were not available. The money raised by Methodists, Baptists and Presbyterians for missions and for benevolent and educational purposes run up into the millions.

CONGREGATIONALIST CHURCH

	Ordained Ministers.	Number of Members.	Church Buildings.	Value.	Number of Parsonages	Value.	All other Church Property	Number of Sunday-Schools.	Number of Pupils.
White and Colored	66	4,714	65	\$ 100,000	7	\$ 6,500	\$ 465,000	66	4,284

PROTESTANT EPISCOPAL CHURCH IN THE DIOCESE OF GEORGIA

Ordained Preachers.	Number of Members.	Number of Church Buildings.	Number of Parsonages.	Number of Sunday-School Pupils.	Value of all Church Property.
Bishops... 1					
Priests.... 47	White 7,090	137	29	White 3,487	\$756,679 87
Deacons... 6	Colored 888	....	..	Colored 989	.....
Total..... 54	Total 7,978	137	29	Total..... 4,406	\$756,679 87

Capital invested for benevolent and educational objects, \$315,837.37.

CHRISTIAN CHURCH (OR DISCIPLES)

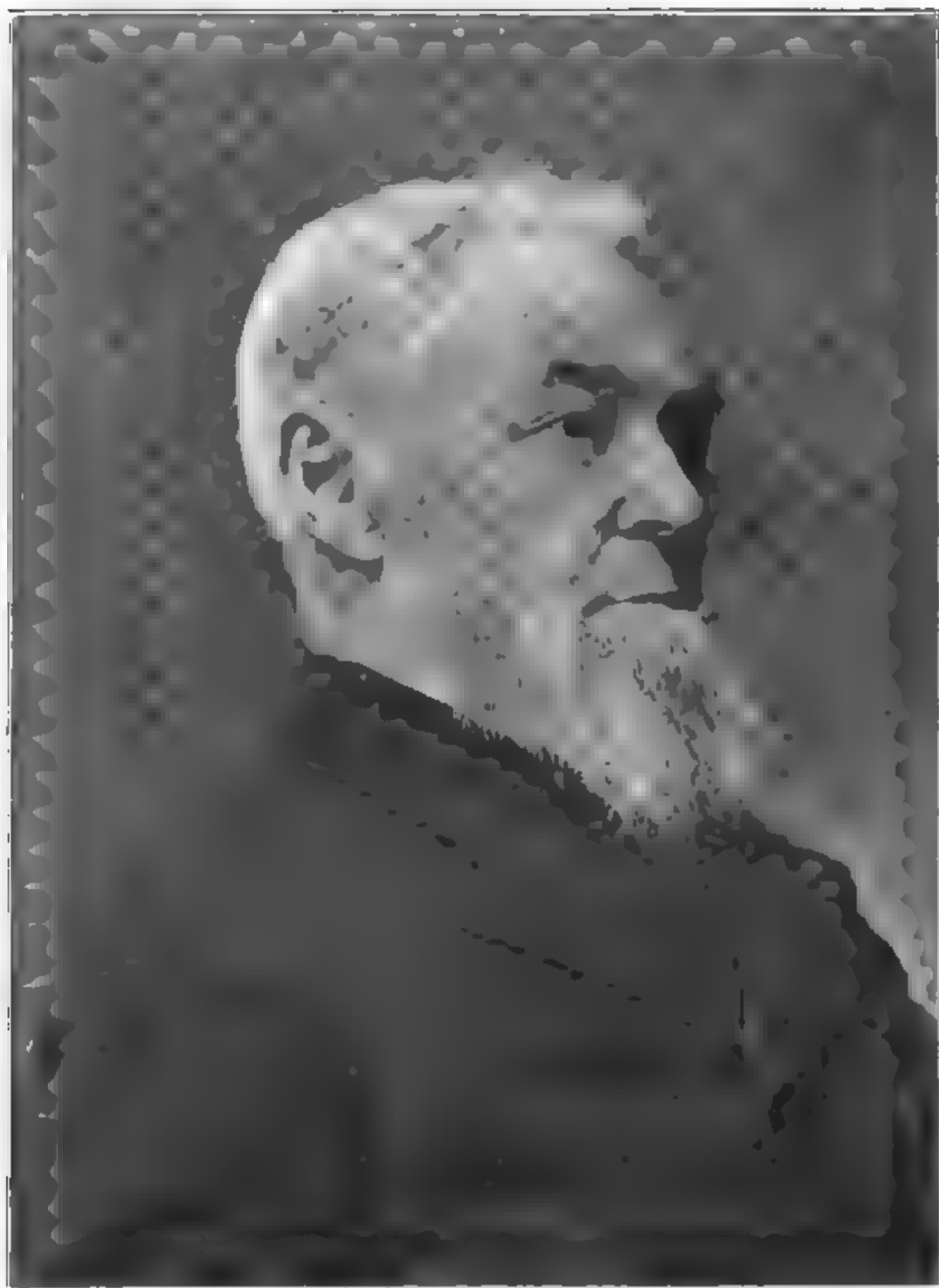
Number of Preachers.	Number of Members.	Church Buildings.	Number of Sunday-School Pupils.	Value of all Church Property.
75	9,805	110	3,147	\$146,200

ROMAN CATHOLIC CHURCH IN THE DIOCESE OF GEORGIA.

Secular Priests... 16	Number of Members.	Church Edifices..... 26	Value.	Parsonages.	Value.	Sunday-Schools.	Pupils.
Priests of Religious Orders.... 25		Chapels 14	\$500,000	18	\$50,000	10	2,500
Total..... 40	20,000	Total..... 40					

Three Orphan Homes, valued at \$20,000.

The Hebrews in Georgia constitute an enterprising law-abiding class of the population, and are found in all the cities and important towns. They number about 6,200, have handsome synagogues in all the large cities and several benevolent institutions in the State.



GOVERNOR ALLEN D. CANDLER.

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CHAPTER XVI.

STATE GOVERNMENT.

The government of Georgia, like that of all the other States of the Union, is republican in form, and is divided into three departments, the Executive, the Legislative and the Judicial.

The executive, or administrative branch of the government, is placed in the hands of the Governor, Secretary of State, Comptroller-General, Treasurer, Attorney-General, Commissioner of Agriculture and State School Commissioner elected by the people, Principal Keeper of the Penitentiary, a Railroad Commission and a Pardon Board appointed by the Governor. The Governor is vested with the veto power.

The legislative department consists of a Senate and House of Representatives, the members of both houses being elected by a direct vote of the people. The State is divided into forty-four senatorial districts from each of which one senator is elected. The members of the House of Representatives are elected from the counties in proportion to population, the more populous counties having three representatives.

The Judicial department consists of the Supreme Court with three justices, the superior court, the court of ordinary, and the justice courts. In addition to these, city and county courts are created by special act, and vested with limited jurisdiction and powers.

The Supreme Court is the court of last resort and has no original jurisdiction. The superior court may be termed a court of general jurisdiction, though its jurisdiction does not extend to all cases. In certain cases it has also appellate jurisdiction. The court of ordinary is the probate court, with general powers relative to county matters. The justice courts have jurisdiction in civil cases arising out of contract and damage to personal property, provided the amount does not exceed \$100. In criminal cases it is a committing court. Under the conservation and safe administration of the State's affairs for many consecutive years, aided by wise enactments of the legislature, Georgia's finances have been brought out of the chaos in which war and reconstruction left them, and now her credit stands as high as that of any State in the Union.

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The constitution of the State adopted in 1877 guards well the rights of the people and prevents extravagant appropriations by the legislature.

The laws enacted give proper protection to individual and corporate capital without any injustice to the laborer. There is no interference by the legislature with the right of contract, except where humanity demands it. In upholding and enforcing the law the courts and the governor have the moral support of the community. Never, except in the case of a most heinous, unmentionable crime, has the right of trial by jury been violated, and even then under the most exasperating circumstances no Georgia mob has even been guilty of the excesses perpetrated by the Illinois mobs in the spring of 1900, or the mob at Akron, Ohio, in August of the same year.

Although the power of taxation is vested in the legislature, the abuse of it is wisely guarded against by the State Constitution. No taxes can be levied by the legislature except for the support of the government and public institutions, the payment of principal and interest of the public debt, to suppress insurrections or repel invasion, to pension under certain restrictions Confederate soldiers and the widows of Confederate soldiers, and to provide a system of elementary education. The Constitution provides that taxation shall be uniform on all classes and *ad valorem* on property. For educational purposes a poll-tax of one dollar is provided.

Public property, colleges, schools, churches, cemeteries, literary associations and public libraries, paintings and statuary not for sale, are exempted from taxation.

County taxation is limited to public works, court expenses, prisons, the debt existing at the time of the adoption of the Constitution. A two-thirds vote is required to increase the debt of any county or municipality, and the amount of the debt must not exceed seven per cent. of the assessed value of property. Counties and municipalities are not allowed to become stockholders in any corporation, and are forbidden to lend or give except to charities and schools. All taxes must be collected under general laws. The property, real or personal, of citizens of the United States not residing in Georgia cannot be taxed higher than the property of residents.

No foreign corporation is allowed to own more than 5,000 acres of land without first becoming a corporation of the State under her laws.

Conveyances of real estate are made by deed, which must be signed by the maker, attested by at least two witnesses, delivered to the purchaser or some one for him, and founded on a valuable or good consideration. No special form is required. It is sufficient, if it states clearly the transaction between the parties. A deed executed out of the State, in order to be entitled to record, must be attested by a commissioner of deeds for

the State of Georgia, a counsel or vice-counsel of the United States, a judge of a court of record, with the certificate under seal of the clerk of the court to the genuineness of the signature of such judge. If the deed is executed in the State, it cannot be recorded, until attested by a judge of a court of record, or a justice of the peace, or a notary public, or a clerk of the superior court.

In the case of the last named officers, the deed must be attested in the county where they hold office. If not so attested at the time of its execution, it may be acknowledged before any of these officers and the fact certified on the deed. If it has not been so attested or acknowledged, it may become entitled to record upon the affidavit of a subscribing witness before either of the officers testifying to the execution and attestation of the deed. If the witnesses are dead or incapacitated, the affidavit of a third party to the execution or genuineness of the signature of the witness or witnesses will admit it to record. Deeds to evade the usury law, or a part of a usurious contract, are void.

The legal rate of interest in Georgia is seven per cent. though by special contract eight per cent. may be charged. Any rate above that is considered usury, the penalty for which is the forfeiture of the excess of interest.

By law certain liens are established.

1. State, counties, and municipal corporations for taxes.
2. Decrees and judgments of the courts.
3. Laborers' special lien on the products of their labor, and generally on the property of their employer.
4. Special liens of landlord for any necessities furnished to tenants for the purpose of making a crop or supporting their families, such lien being upon crops made during the year in which such supplies were furnished. They have also a general lien for rent.
5. Lien held by mechanics on property manufactured or repaired, for material furnished or work done.
6. Innkeepers, carriers, stable-keepers, pawnees, and depositaries have liens on special property in their possession.
7. Mechanics, contractors, material men, manufacturers, including corporations, have liens on railroads, factories, houses, etc., for material furnished or for work done.

The general rule is that liens must be enforced by suits within one year.

The statutes of limitations fix certain limits on the time in which actions must be brought, as follows: instruments under seal, twenty years; statutory rights, twenty years; promissory notes not under seal

and other simple contracts in writing, six years; contracts not in writing and open accounts, four years; foreign judgments, five years; domestic judgments, seven years without execution issued, with docketed seven years from the last entry on the execution. Dormant judgments may be revived by *scire facias* within three years from dormancy; suits against administrators, guardians, executors or trustees, except on their bonds, ten years; suits to recover trust property, three years after the removal of the disability; trespasses or damages to realty or personalty, four years; personal injuries, two years; injuries to reputation, *qui tam* actions of informers, and claims against a county, one year; against discharged administrator by the heirs or distributees, five years.

The extreme penalty of the law for murder is death or imprisonment for life. For capital offenses other than murder the limit of imprisonment is seven years; for all other felonies, four years; for misdemeanors, two years.

All promises to answer in any way for the debts of others, in order to be binding, must be in writing, signed by the party to be bound, or his authorized agent.

The homestead laws differ materially from those of most States, being somewhat in the nature of a trust estate in charge of the court for the benefit of dependents, which becomes subject to debts when the conditions and purposes for which it was created cease to exist.

Due precaution is taken to prevent fraud on the part of debtors in disposing of and conceding their property. While statutory proceedings in attachment and garnishment are allowed upon the usual grounds, the wages of daily, weekly and monthly laborers are excepted from garnishment.

The rights of creditors are favored by the courts and every facility for the collection of debts has been made.

In the making of a will no particular form is required. All wills, except nuncupative, must be in writing, signed by the maker, or in his presence and by his direction. Every will must be attested by three competent witnesses in the presence of the testator. All wills disposing of real property in the State, in order to be entitled to probate, must be executed with the same formality as if made in the State. Bequests to any kind of institutions must be executed at least ninety days before the death of the testator, and must not so dispose of more than a third of the estate, if the testator has a wife, child, or descendants. If any bequest violates this rule, it is null and void.

The legal age at which marriage may be contracted is seventeen in males and fourteen in females. Under eighteen in females the consent



DR. THOS. P. JANES,
First Commissioner of Agriculture.

of the parents must be obtained. Marriage within the Levitical degrees of affinity and consanguinity are forbidden.

Miscegenation, or marriage between the white and colored races, is forbidden.

The divorce laws are better than those of many States, in that they make the sundering of the marriage tie no easy matter.

The property rights of the wife, both real and personal, are fully protected by the law.

Banking, insurance, railroad, canal, navigation, express, and telegraph companies, formerly chartered by the General Assembly are now chartered by the Secretary of State upon petition, and are given by statute the powers usually conferred upon such companies. Other corporations are chartered by the superior court in the county where their principal office is located.

The Comptroller-General is *ex officio* Insurance Commissioner, and a license from him, granted only upon certain conditions, is required of all companies, and to him statements of the assets and liabilities of the companies must be made. No security is required of purely mutual life companies. Fire insurance companies are required to make a deposit of \$25,000 in cash or approved bonds, and life insurance (stock) companies must make a deposit of \$100,000.

The State Treasurer is by law the State Bank Examiner, and is required to examine each bank at least once a year, and to him is made a quarterly statement which is required to be published. The general banking laws of Georgia furnish the depositors excellent protection against fraudulent loss. One of these laws forbids their lending to their officers without good collateral, and except on collateral no more than ten per cent. of their capital can be loaned to any one person. Cash assets must not be reduced below 25 per cent. of the deposits. Every precaution is taken against any possibility of fraud.

Pure food laws protect the people of the State against adulterated and unwholesome foods of any kind.

The propagation of fish is confided to the Commissioner of Agriculture, who is authorized to employ a superintendent of fisheries, who, under the direction of the commissioners, shall have charge of the propagation of fish.

In all the rivers of Georgia, in which shad are caught, there is a "closed time" of forty-eight hours each week, from sunrise on Saturday to sunrise on the following Monday, during which no shad or other migratory fish are allowed to be caught by any means whatever. No shad are allowed to be taken by any means whatever except between the

first day of January and the twentieth day of April of each year, except for spawning purposes.

The game laws protect birds and all othe game against hunters during certain specified seasons.

The Commissioner of Agriculture is charged with the execution of the quarantine laws for the protection of cattle against Texas fever and the cattle tick. For a thorough understanding of this subject we publish the bulletin on Cattle Quarantine Laws, published by the Department of Agriculture.

AUTHORITY FOR MAKING RULES AND REGULATIONS.

AN ACT.

To protect the cattle of this State from all contagious or infectious diseases, to authorize and empower the Commissioner of Agriculture of this State to establish, maintain and enforce quarantine lines, and make such rules and regulation as he may deem proper and necessary for the purpose of carrying into effect the provisions of this Act, to prohibit the driving of diseased cattle through said State, or cattle calculated to spread disease, to provide a penalty for violation of same, and for other purposes.

COMMISSIONER OF AGRICULTURE'S DUTY.

Section 1. Be it enacted by the General Assembly of the State of Georgia, and it is hereby enacted by authority of same, That the Commissioner of Agriculture of this State shall immediately upon the passage of this Act, and from time to time thereafter, ascertain in what sections of this State cattle are free from contagious or infectious diseases and splenetic fever.

QUARANTINE FOR CATTLE.

Sec. 2. Be it further enacted by the authority aforesaid, That wherever the cattle of any section of this State are found to be free from contagious and infectious diseases and splenetic fever, said Commissioner of Agriculture is hereby authorized, empowered and required to establish and maintain such quarantine lines, and to make and enforce such rules and regulations as may be necessary for the protection of such cattle.

CO-OPERATION WITH OTHER STATES.

Sec. 3. Be it further enacted by the authority aforesaid, That the said Commissioner shall co-operate with the officials of other States, and with the Secretary of Agriculture of the United States in establishing such

quarantine lines, rules and regulations as he shall deem proper and best for the protection of the cattle of this State free from any of the diseases referred to in the foregoing sections of this Act.

PENALTY.

Sec. 4. Be it further enacted by the authority aforesaid, That any person or persons, company or corporation who shall violate any quarantine provisions, rules or regulations established by the Commissioner of Agriculture of this State, under the authority conferred by this Act, shall be guilty of, and, upon conviction, punished as for a misdemeanor.

Sec. 5. Be it further enacted, That all laws and parts of laws in conflict with this Act be, and the same are, hereby repealed.

Approved December 20, 1899.

PROCLAMATION OF THE RULES AND REGULATIONS FOR THE CONTROL OF CONTAGIOUS OR INFECTIOUS DISEASES OF CATTLE.

To Whom it May Concern:

In accordance with the authority and power conferred by the General Assembly of Georgia in the Act No. 374, laws of 1899, entitled, "An Act to protect the cattle of the State from all contagious or infectious diseases, to authorize and empower the Commissioner of Agriculture of this State to establish, maintain and enforce quarantine lines, and make such rules and regulations as he may deem proper and necessary for the purpose of carrying out the provisions of this Act, to provide penalties for violation of the same, and for other purposes," I, O. B. Stevens, Commissioner of Agriculture of the State of Georgia, after due inquiry into the conditions of cattle-raising in this State and the prevalence of communicable cattle diseases, do hereby set forth and declare the following rules and regulations for the control of contagious or infectious diseases of cattle in the State of Georgia.

April 30, 1901.

(Signed)

O. B. STEVENS,
Commissioner of Agriculture.

RULES AND REGULATIONS.

The term cattle used in these regulations shall include bulls, oxen, steers, cows, heifers, yearlings and calves.

The terms "contagious" or "infectious diseases" shall include all diseases of cattle which are communicable from animal to animal; for example, contagious abortion, tuberculosis, (actinomycosis), anthrax, rabies, or splenic fever (including red water, bloody murrain, acclimation disease, Texas cattle fever, tick fever, and other local names).

Section 1. Whenever any contagious or infectious disease of cattle shall exist in any portion of this State, the infected cattle or infected material which may convey disease, or both, or animals which may have come in contact with such disease, shall be quarantined on the premises or in lots or buildings in which they may be found, until such time as danger from the spread of disease has passed, all necessary disinfection is completed, and they are released by order of the Commissioner of Agriculture.

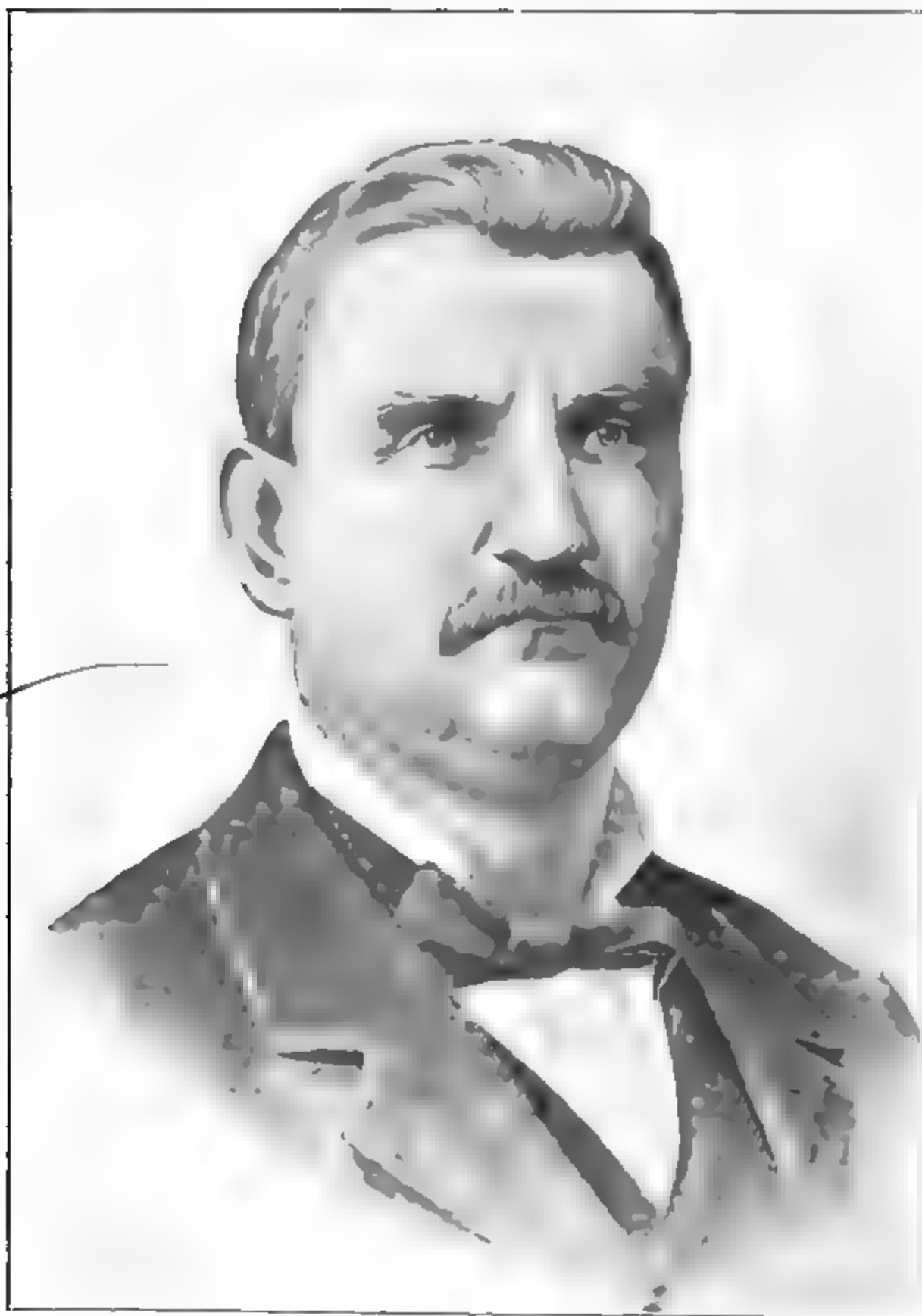
Sec. 2. The annual regulations and amendments thereof of the United States Department of Agriculture concerning Interstate cattle transportation are hereby adopted as a portion of these regulations during such time as said regulations are in force.

Sec. 3. No cattle shall be transported, driven or caused to be driven, or allowed to stray from any place in the quarantine district in this State, into the districts exempted from the Federal quarantine by the United States Secretary of Agriculture between such dates as the Secretary and the Commissioner of Agriculture shall determine upon; Provided, that this order shall not apply to cattle transported by rail, consigned through such exempted districts to other States, which are transported in accordance with the Federal regulations relating to Interstate transportation of cattle.

Sec. 4. No cattle originating in the area of other States prescribed by the Secretary of Agriculture of the United States as having a contagious or infectious disease, known as splenetic or Southern fever, among its cattle, shall be transported, driven or caused to be driven, or allowed to stray at any time of the year across or into any portion of this State in which cattle are declared by the said Secretary of Agriculture as being exempted in whole or in part from the operations of the Federal regulations concerning transportation of cattle originating in certain areas; Provided, this section shall not apply to interstate traffic in cattle by rail or by boat transacted in accordance with the Federal regulations relating thereto, or to uninfected cattle exempted by special permit of the United States Secretary of Agriculture; Provided further, that between such dates and under such regulations as may be agreed upon by the said Secretary of Agriculture and the Commissioner of Agriculture of this State, cattle may be transported, driven, or caused to be driven, or allowed to stray when found free of infection.

Sec. 5. When cattle from the infected areas, as defined by the Secretary of the United States Department of Agriculture in the annual regulations concerning cattle transportation and the amendments thereof, shall have moved or been moved in violation of these regulations or their amendments, the feeding places, yards, and pasturages upon which the said cattle have been moved shall become infected districts and subject to the same regulations as other infected areas; the limits of said infected area shall be defined by the extent of range allowed the animals from the infected areas and by the efficiency of the exclusion of other cattle from said infected districts.

Sec. 6. Notice is hereby given that cattle infested with the Boo-



**HON. JOHN T. HENDERSON, SECOND COMMISSIONER OF
AGRICULTURE.**

philus Bovis, or Southern cattle tick, disseminate the contagion of splenetic fever; therefore cattle which are found in the exempted districts infested with tick (*Boophilus Bovis*) shall be considered as infectious cattle.

Sec. 7. Such infectious cattle, or cattle suspected of being infectious, shall be kept in close quarantine and not admitted to the public road or free range until such time as they are disinfected or proven to be uninfected, and permission is granted by the Commissioner of Agriculture for their removal.

SPECIAL ORDER NO. 1.

Whereas, the cattle owners of Gilmer, Fannin, Union, Towns and Rabun counties have appealed to this Department for protection of their cattle from splenetic fever and cattle ticks, and it appears that the cattle of a greater portion of said counties are free from these pests, it is hereby ordered:

Section 1. That no cattle shall be driven into the counties of Gilmer, Fannin, Union, Towns and Rabun from any part of this State in which the cattle are declared infected with splenetic fever infection by the United States Secretary of Agriculture, or from any other State or portion thereof in which the cattle are declared infected until such cattle are exempted from the quarantine regulations by the said Secretary of Agriculture.

Sec. 2. That all cattle within the aforesaid area which are infested with cattle ticks, or which are suspected of being infected with such ticks, shall be placed in close quarantine and not allowed on the public roads or at large until such a time as shall be proven that they are not so infested, and they shall be released by order of the Commissioner of Agriculture.

The Commissioner will, upon application of the Ordinary or cattle owners of any county, temporarily forbid the entrance of cattle from any infected county or district until such time as danger of infection from said county or district is past. This local quarantine will be published in local newspapers and sufficient notices will be posted on the public roads.

Georgia Department of Agriculture.
Federal Cattle Quarantine Line.
Special Regulation No. 1.

Authorized by Georgia Laws of 1899, No. 374, "Protection of cattle against infectious diseases."

On and after this date no cattle (bulls, steers, oxen, cows, heifers, yearlings or calves) shall be led, driven, or caused to be driven, allowed to stray or carried in any manner into the counties of Gilmer, Fannin, Union, Towns and Rabun.

Violation of the above is a misdemeanor.

By order of

O. B. STEVENS,
Commissioner.

Atlanta, Ga., April 30, 1901.

DUTIES OF CATTLE INSPECTORS.

1. To see that the Rules and Regulations this day issued by the Commissioner of Agriculture of Georgia, found in another portion of this bulletin, be strictly enforced and carried out.

2. To locate all territory in your division or district of this State that may now or hereafter become infested with fever ticks. Take any legal steps necessary to prevent the ticks from spreading therefrom to any other territory in Georgia.

3. Place all infested cattle and pastures in quarantine, and report same, giving location of infested areas to the State Commissioner of Agriculture, Atlanta, Georgia.

4. Use all possible means to the end of exterminating the ticks on such infested farms or areas. Urge the cattlemen to grease them and care for their cattle, looking to the prevention of further propagation of the tick.

5. Advise the burning over, both in fall or spring, of all infested pastures or ranges with a view to the destruction of the cattle tick.

You will be held strictly to account for any trouble arising from the neglect of these instructions.

This April 30th, 1901.

Nota.—Cattle inspectors receive salary from the State department, and cannot make any charges for inspecting cattle.

TEXAS FEVER AND CATTLE TICK.

No disease to which our cattle are susceptible has such an important bearing upon the cattle interests of the Southern States as "Southern Cattle Fever" or "Texas Fever." For this reason we have deemed it wise to issue from this department a short bulletin giving the salient points of the cause, history and present conditions, with a few common sense suggestions as to the prevention of this dread disease, known as the "Texas Fever." To a very large degree this disease prohibits the importation into our Southern country of pure bred animals from areas north of the United States' quarantine line of which we may be desirous for the building up of our dairy and beef cattle interests. Besides it has resulted in a barrier being placed by the Federal authorities known as the "Federal Quarantine Line" for the protection of Northern cattle against the exportation of our Southern stock to Northern markets, except these cattle be carried by rail or boat for immediate slaughter, which cripples to a great degree the Southern cattle industry on account of this cattle disease. It has been proved by experiment that when ticks which have been living on the blood of our Southern cattle are transported to latitudes north of the Federal Quarantine Line and become attached to cattle in those sections, or when Northern cattle from above the quarantine line are brought South and subjected to infection by ticks from our stock, the animals will contract this malady, which proves that the tick is the means through which the contagion is conveyed. Now, what we are most interested in, is how to

get rid of the tick, for when we destroy this pest we remove the source of this dreadful disease, which is called by many names, to wit: "Murrain, Bloody Murrain, Red Water, Yellow Water, Black Water, Acclimating Fever, etc., and according to the authorities all of these diseases are nothing more nor less than the Texas or Southern Cattle Fever. Nearly all authorities agree that this Bovine tick fever is a specific fever, communicated not in a direct manner from one animal to another, but indirectly through the medium of cattle from infected pastures, roads and other places, and in an indirect manner conveying the disease to susceptible animals which are exposed to those infected surroundings.

When it is known that beef cattle above the Federal Quarantine Line are worth from one to one and one-half cents per pound more than the same grade of cattle below the line, our people in Georgia can readily see the enormous profits they have lost for years past. By virtue of the fact that most of the counties of our State are tick infested they will see the importance of energetic, systematic and judicious work looking to the suppression of this dreaded pest named by Dr. Cooper Curtice the *Boophilus Bovis*.

WHEN AND WHERE THE TICK IS FOUND.

The cattle tick is found in warm weather in most of the States that lie south of the 35th parallel of latitude. During the heat of summer the Northern distribution is sometimes extended into Northern markets, but it is killed off in the fall or early winter months. In mild winters the tick may be found at any time of the year in South Georgia, but in some of the counties in extreme North Georgia the tick is practically exterminated by the frosts of winter and does not reappear until brought back in the course of cattle traffic. In severe winters this extermination extends further southward.

DIFFERENCE BETWEEN TICKS.

Dr. Cooper Curtice gives the following description of ticks:

"The fact that at least three species of ticks may be found on cattle and that one is disease bearing and outlawed, would seem to complicate matters. The existence of the other two species, however, enters very little into the problem practically, for they are easily told apart and are quite different in habits.

"All these ticks look alike, especially the large females, which are those usually seen. They are often as large as a castor oil bean seed, and usually leaden blue in color; have a soft, leathery body provided with four pairs of little legs and a hard little head with movable mouth parts. The three varieties can be distinguished by a glance at their heads. In the cattle tick the color is solid chestnut brown. In the variety that also pesters people, horses and dogs, the head has a little bright, often golden, spot at its back edge, from which it has gained the name 'lone star tick,' 'pass or spot tick.' The third variety, which

is often found on deer, dogs and other animals, has the head nearly white or with a white margin. It is commonly called 'deer tick,' 'dog tick' or 'bear tick.' These characters will always serve to distinguish the species. While the male, which is an inconspicuous little fellow, always accompanies the female, his presence is of no practical importance, since it is the female which attracts our attention and against which all efforts must be made. Their resemblance, especially in the head parts, to the females, and their association with females, enables the observer to readily classify them.

"The lone star tick and the dog tick usually attach themselves to animals when the latter are going through the woods or in marshy places, while the cattle tick rarely gets on man, or other animals save possibly horses, and is always found in pastures where cattle have spread them.

"The star tick and the dog tick usually get about the ears, dewlap and sides of cattle, while cattle ticks are most numerous on the lower edge of the dewlap, along the underparts and on the thighs of the cattle. This is because the little ticks are the most numerous where the cows rest and get on them from short grass.

"The lone star and the dog tick are most commonly found from June to August, and then seem to disappear. They are soon followed by 'seed ticks,' which get upon one walking through the pastures and sink their heads beneath the skin. Often at the same time the 'midding' or 'yearling,' an intermediate size between the seed and adult tick, is encountered. These are but different stages of either of the above ticks. Cattle ticks are not numerous in the spring, but rapidly increase in numbers as the seasons wear, or until they are said to literally shingle the cows by their hosts. The same steps of growth occur as in the other species, but they rarely if ever get upon people and spend their whole existence upon the cattle. It thus happens that the careful investigator may find all the stages from the seed tick, which may be seen by very close examination, up to the unsightly adult female."

LIFE OF THE CATTLE TICK.

Most authorities agree that all cattle ticks come from eggs laid by other ticks, and can only reach maturity on cattle; that the tick drops from the cow and remains passive a few days, then begins to lay eggs, and in two weeks she has laid some two thousand eggs to be hatched out in from three to six weeks according to the temperature of the weather. These eggs are generally deposited under a bunch of grass, leaves or sticks, being sheltered from the direct rays of the sun. When hatched the young ticks, or "seed ticks," spread out short distances, and attach themselves to the nearest blade of grass or twig and collect at their tops, and there appear to merely exist in wait for their future host—the cow.

After arriving on the cattle they remain there from three to four weeks, when the females become mature, and fall from the cattle to the ground wherever the cattle happen to be when the tick becomes



HON. R. T. NESBITT,
Third Commissioner of Agriculture.

mature. Hence the places most frequented by the cattle in the pasturage are where you will find the most infection, yet any place may become infected provided the cattle pass over it and drop the tick at such a place.

In summing up the life history of the tick Dr. Cooper Curtice says:

1. Ticks are introduced on farms by cattle.
2. Seed ticks appear in from twenty-five days to six weeks.
3. Ticks grow to maturity in about four weeks after they attach to cattle.
4. Ticks when mature fall to the ground to give rise to new multitudes.

SOME REMEDIAL SUGGESTIONS.

If proper and judicious work be done, there is no good reason why the farms and counties of North Georgia should remain infected longer than twelve months. In point of fact many militia districts, as well as almost entire counties, are practically free of the disease-carrying tick. We would not advise the discrimination between ticks, as all ticks are noxious and loathsome. Early spring is perhaps the best time to begin work, for the destruction of a single tick in spring is often the means of preventing thousands from coming into life. A female tick which lays from two to twenty-five hundred eggs will likely produce one thousand pairs of ticks. One tick in spring or summer will be sufficient to stock a farm of ordinary size in one year. Fields used for growing crops must be considered as uninfected, since frequent plowing and turning over the soil destroys the tick to a large degree. Old fields may be disinfected by burning off the dry grass in early spring and during the fall; but we would advise that marshy places and corners and small plots of woods that cannot be burned off be fenced from the cattle, as they would furnish a sufficient number of ticks to reinfect the whole pasture. If a large area now used for pasturing cattle be divided by a fence and use only one-half of the pasture for cattle, not allowing cattle to trespass upon the other half of the pasture, this method would practically free the latter half of the pasture from ticks in twelve months. If, however, the pasture be small and conditions are not suited to the above method, then the cattle must be carefully and continuously picked during the spring and summer, using from time to time sulphur and lard, or any grease that is most convenient. If this hand-picking is continued daily a small farm can be cleaned of the ticks in a short while. Oils and grease, however, have their uses on farms, and aid materially in disinfection, and save labor in the hand-picking process. A little tar mixed with the grease is advisable. The cattle should be thoroughly rubbed from time to time with these ointments. But there can be no successful extermination of the tick unless the county at large co-operates in this matter, to the extent that the highways and market places and stock yards shall be kept free of infection. So, if cattle men generally will carefully comply with the rules and regula-

tions and adopt the above suggestions, they will find that the extermination of the tick is but an easy matter, requiring patience and perseverance, with only a small expense.

SOME OF THE SYMPTOMS OF THE DISEASE.

Dr. Curtice says that experiment and observations show that the majority of cases break out and die in from 10 to 21 days after infection. For the first few days there is no fever or any indication of the disease, but either on the fifth or sixth day a very high fever breaks out, which often renders the animal delirious or stupid; their heads droop, their ears lop, cud chewing is suspended, and other signs of ill health follow. They usually die towards the end of the first week of fever, although some last into the second week, while a small percentage survive. The urine of diseased animals is usually deeply stained and appears even dark or black red, resembling the color of coffee. The eyeballs and other mucous membranes show a yellow cast. If the animals survive the attack of fever they remain poor and recover very slowly. The virulence of this disease varies at different seasons of the year, and in different animals. All who may desire to study this question fully from a scientific point we would advise to write to Dr. D. A. Salmon, Chief of the Bureau of Animal Industry at Washington, D. C., for bulletins on Texas fever and cattle tick. If this little bulletin should create an interest in the study of this disease and the remedies therefor, and bring about co-operation of the people looking to the suppression of this disease, its object will have been accomplished. Get rid of the tick and you get rid of the disease.

ACKNOWLEDGMENTS.

Much of the data given in this paper is taken from a bulletin from the North Carolina Bureau of Agriculture by Dr. Cooper Curtice, who was at the time of issue State Veterinarian of North Carolina.

FERTILIZER LAWS.

To prevent fraud and imposition in the sale of fertilizers, all fertilizers and fertilizer material sold, or offered for sale in the State must be registered, inspected and analyzed. Each bag, barrel or package must have branded thereon, or attached thereto, the guaranteed analysis of the manufacturer and dealer. In the event it does not come up to the guarantee, failure of consideration can be plead. All complete fertilizers must contain 2 per cent. of ammonia, actual or potential, with a sum of not less than 8 per cent. of available phosphoric acid and potash. Other fertilizers must contain 10 per cent. of available plant food. Failure to come up to the standard of the State voids the sale.

For the convenience of both manufacturer and consumer, the law regulating the sale of Commercial Fertilizers, passed and approved October 9th, 1891, is given in full below:

AN ACT.

To amend and consolidate the laws governing the inspection, analysis and sale of commercial fertilizers, chemicals and cotton-seed meal in the State of Georgia and to repeal all other laws and parts of laws in conflict therewith, and for other purposes.

Section I. Be it enacted by the General Assembly of the State of Georgia, That all manufacturers of, or dealers in, commercial fertilizers or chemicals, or cotton-seed meal, to be used in manufacturing the same, who may desire to sell or offer for sale in the State of Georgia such fertilizers, chemicals or cotton-seed meal, shall first file with the Commissioner of Agriculture of the State of Georgia the name of each brand of fertilizers or chemicals which he or they may desire to sell in said State, either by themselves or their agents, together with the name of the manufacturer, the place where manufactured, and also the guaranteed analysis thereof, and if the same fertilizer is sold under different names, said fact shall be so stated, and the different brands that are identical shall be named.

Sec. II. Be it further enacted, That all fertilizers, or chemicals for manufacturing the same, and all cotton-seed meal offered for sale or distribution in this State, shall have branded upon, or attached to, each bag, barrel or package the guaranteed analysis thereof, showing the percentage of valuable elements or ingredients such fertilizers or chemicals contain, embracing the following determinations:

Moisture at 212 deg. Fah.....	per cent.
Insoluble phosphoric acid.....	per cent.
Available phosphoric acid.....	per cent.
Ammonia, actual and potential.....	per cent.
Potash (K^2O)	per cent.

The analysis so placed upon, or attached to, said fertilizer or chemical shall be a guarantee by the manufacturer, agent or person offering the same for sale that it contains substantially the ingredients indicated thereby, in the percentages name therein, and said guarantee shall be binding on said manufacturer, agent or dealer, and may be pleaded in any action or suit at law to show total or partial failure of consideration in the contract for the sale of said fertilizer, chemical or cotton-seed meal.

Sec. III. Be it further enacted, That it shall be the duty of the Commissioner of Agriculture to forbid the sale of either of the following: Any acid phosphate which contains less than ten per centum of available phosphoric acid; any acid phosphate with potash which contains a sum total of less than ten per centum of available phosphoric acid and potash when the per cents. of the two are added together; any acid phosphate with ammonia which contains a sum total of less than ten per centum of available phosphoric acid and ammonia when the per

cents. of the two are added together; any acid phosphate with ammonia and potash which contains a sum total of less than ten per centum of available phosphoric acid, ammonia and potash, when the per cents. of the three are added together; that no brands shall be sold as ammoniated superphosphates unless said brands contain 2 per cent. or more of ammonia. And also to forbid the sale of all cotton-seed meal which is shown by official analysis to contain less than 7 1-2 per cent. of ammonia. Nothing in this act shall be construed to nullify any of the requirements of an act entitled an act to require the inspection and analysis of cotton-seed meal.

Sec. IV. Be it further enacted, That all persons or firms who may desire or intend to sell fertilizers, chemicals or cotton-seed meal in this State, shall forward to the Commissioner of Agriculture a printed or a plainly written request for tags therefor, stating the name of the brand, the name of the manufacturer, the place where manufactured, the number of tons of each brand and the number of tags required, and the person or persons to whom the same is consigned, the guaranteed analysis, also the number of pounds contained in each bag, barrel or package in which said fertilizer, chemical or cotton-seed meal is put up, and shall at the time of said request for tags forward directly to the Commissioner of Agriculture the sum of ten cents per ton as an inspection fee; whereupon it shall be the duty of the Commissioner of Agriculture to issue tags to parties so applying, who shall attach a tag to each bag, barrel or package thereof, which, when attached to said bags, barrel or package, shall be *prima facie* evidence that the seller has complied with the requirements of this act. Any tags left in possession of the manufacturers or dealers at the end of the season shall not be used for another season, nor shall they be redeemable by the Department of Agriculture.

Sec. V. Be it further enacted, That it shall not be lawful for any person, firm or corporation, either by themselves or their agents, to sell or offer for sale in this State any fertilizer, chemical or cotton-seed meal without first registering the same with the Commissioner of Agriculture, as required by this act, and the fact that the purchaser waives the inspection and analysis thereof shall be no protection to said party so selling or offering the same for sale.

Sec. VI. Be it further enacted, That the Commissioner of Agriculture shall appoint twelve inspectors of fertilizers, or so many inspectors as in said Commissioner's judgment may be necessary, who shall hold their offices for such terms as said Commissioner of Agriculture shall in his judgment think best for carrying out the provisions of this act. The greatest compensation that any one inspector of fertilizers shall receive shall be at the rate of one hundred dollars per month and his actual expenses while in the discharge of his duty as such inspector. It shall be their duty to inspect all fertilizers, chemicals or cotton-seed meal that may be found at any point within the limits of this State and go to any point when so directed by the Commissioner of Agriculture, and shall see that all fertilizers, chemicals or cotton-seed meal are properly tagged.



HON. O. B. STEVENS COMMISSIONER OF AGRICULTURE.

Sec. VII. Be it further enacted, That each inspector of fertilizers shall be provided with bottles in which to place samples of fertilizers, chemicals or cotton seed meal drawn by him, and shall also be provided with leaden tags, numbered in duplicate from one upward, and it shall be the duty of each inspector of fertilizers to draw a sample of all fertilizers, chemicals and cotton-seed meal that he may be requested to inspect, or that he may find uninspected, and he shall fill two sample bottles with each brand, and place one leaden tag of same number in each sample bottle, and shall plainly write on a label on said bottles the number corresponding to the number on said leaden tags in said bottles, and shall also write on the label on one of said bottles the name of the fertilizer, chemical or cotton-seed meal inspected, the name of the manufacturer, the place where manufactured, the place where inspected, the date of inspection, and the name of the inspector, and shall send or cause to be sent to the Commissioner of Agriculture the sample so drawn by him annexed to a full report of said inspection, written on the form prescribed by said Commissioner of Agriculture, which report must be numbered to correspond with the number on said sample bottles and number on the leaden tags placed therein; and it shall also be the duty of said inspectors of fertilizers to keep a complete record of all inspections made by them on forms prescribed by said Commissioner of Agriculture. Before entering upon the discharge of their duties they shall take and subscribe, before some officer authorized to administer the same, an oath faithfully to discharge all the duties which may be required of them in pursuance of this act.

Sec. VIII. Be it further enacted, That the Commissioner of Agriculture shall have the authority to establish such rules and regulations in regard to the inspection, analysis and sale of fertilizers, chemicals and cotton-seed meal not inconsistent with the provisions of this act, as in his judgment will best carry out the requirements thereof.

Sec. IX. Be it further enacted, That it shall be the duty of the Commissioner of Agriculture to keep a correct account of all money received from the inspection of fertilizers, and to pay the same into the treasury, after paying out of said sum the expenses and salaries of inspectors, and for the tags and bottles used in making such inspections.

Sec. X. Be it further enacted, That all contracts for the sale of fertilizers or chemicals in the State of Georgia made in any other manner than as required by this act, shall be absolutely void; *provided*, that nothing in this act shall be construed to restrict or avoid sales of acid phosphate, kainit or other fertilizer material in bulk to each other by importers, manufacturers or manipulators who mix fertilizer material for sale, or as preventing the free and unrestricted shipment of these articles in bulk to manufacturers or manipulators who mix fertilizer material for sale.

Sec. XI. Be it further enacted, That any person selling or offering for sale any fertilizers or chemicals without first having complied with the provisions of this act, shall be guilty of a misdemeanor, and on con-

viction thereof shall be punished as prescribed in section 4310 of the Code of Georgia.

Sec. XII. Be it further enacted, That all laws and parts of laws in conflict with this act be, and the same are, hereby repealed.

FORMAL REQUEST FOR REGISTRATION.

To O. B. Stevens, Commissioner of Agriculture, Atlanta, Ga.:

You are hereby requested to register for sale and distribution in the State of Georgia.....manufactured by.....
at.....

THE FOLLOWING IS THE GUARANTEED ANALYSIS OF THE BRAND.

Moisture at 212 deg. Fah.....	per cent.
Insoluble phosphoric acid.....	per cent.
Available phosphoric acid.....	per cent.
Ammonia, actual and potential.....	per cent.
Potash (K^2O)	per cent.
The ammonia is in the form of.....	

Nitrate of soda has.....been used in the manufacture of this brand.

The.....is put up in.....of
..... lbs. each
It is identical with.....

In consideration of being allowed to sell and distribute the above brand before the official analysis thereof is made.....agree and bind..... to cancel all sales thereof and forfeit all claims for purchase money therefor, if, after the official analysis is made, the Commissioner of Agriculture shall prohibit its sale in accordance with the law.

2. Under section 4, relating to requests for tags, in order that no delay may occur in shipments, the manufacturer or dealer need not notify the Department at the time of the request for tags of the name of the purchaser or consignee, but must notify the Commissioner in writing of every sale or consignment on the day in which the same is made. This notice must distinctly state the brand of the fertilizer or the name of the chemical or fertilizer material and the number of tons, together with the name of the purchaser or consignee and their places of residence. It must request inspection and contain an agreement to cancel all sales thereof, in the event the Commissioner shall prohibit its sale in accordance with law. The following form may be used, substantial compliance with the above rule being regarded as sufficient:

NOTICE OF SALES AND CONSIGNMENTS, AND REQUEST FOR INSPECTION.

.....190

To O. B. Stevens, Commissioner of Agriculture, Atlanta, Ga.:

You are hereby notified that.....have this day made the following sales and consignments, and request that the same be inspected:

In consideration of being allowed to sell and distribute the above before the official analysis thereof is made.....agree and bind.....to cancel all sales thereof and forfeit all claims for purchase money thereof, if, after the official analysis is made, the Commissioner of Agriculture shall prohibit its sale in accordance with law.

Manufacturers and dealers, by this rule, are not required to delay shipment in order that the inspection may be made, but are required to see that their goods are properly tagged, the inspection being made while the fertilizer or fertilizer material is in the hands of the purchaser or consignee.

3. All orders for tags must be sent direct to this department, and the request must be accompanied with the fees for inspection at the rate of ten cents per ton for the fertilizer or fertilizer material on which they are to be used.

Manufacturers and dealers, or their agents, may request tags in such quantities as they see fit, but each request must state distinctly the brand or brands on which they are to be used, with the number of tons of the brands, or of each of said brands.

It is not necessary that the fertilizer or fertilizer material be actually on hand at the time the request is made, but manufacturers or dealers can order such number of tags as they may need during the season, bearing in mind that no tags carried over will be redeemed by the department.

In the event that more tags are ordered for any brand than it is ascertained can be used on the sales and consignments of that brand, by proper notice, with the consent of the Commissioner, the tags can be used on another brand put up in packages or sacks of the same weight and sold or consigned the same season.

4. If a fertilizer be offered for registration, inspection or sale branded as either of the following:

"Ammoniated Superphosphate,"

"Ammonia Dissolved Bone,"

"Ammoniated Guano,"

"Guano,"

"Fertilizer."

or other words implying that the same is an ammoniated superphosphate.

the guaranteed analysis must claim that it contains not less than two per cent. of ammonia (actual or potential).

5. That part of section 3 excepting from the operations of the act an act to require the inspection and analysis of cotton-seed "meal" leaves the inspection of that article under the Calvin bill, which requires that all cotton-seed meal, for whatever purpose to be used, be inspected. It is therefore necessary, and is required, that a request for inspection be sent to the Commissioner, and that the inspection be made in the hands of the manufacturer, dealer or their agent, or, if shipped in the State, at some convenient point, before the meal is sold or distributed. In all cases fees will be sent direct to the Commissioner, who will immediately order the nearest inspector to make the inspection.

CALVIN BILL.

COTTON SEED MEAL.

A bill to be entitled an act to require all cotton-seed meal to be subjected to analysis and inspection as a condition precedent to being offered for sale, and to forbid the sale in this State of such cotton-seed meal if it be shown by the official analysis that the same contains less than 7 1-2 per centum of ammonia; to prescribe a penalty for the violation of the provisions of this act, and for other purposes.

Section I. Be it enacted by the General Assembly of Georgia, and it is hereby enacted by the authority of the same, That from and after the passage of this act it shall not be lawful for any person or persons to offer for sale in this State any cotton-seed meal until the same shall have been duly analyzed by the State Chemist and inspected as now required by law in the matter of all fertilizers and chemicals for manufacturing or composting purposes; nor shall it be lawful to offer such cotton-seed meal for sale in this State if it be shown by the official analysis that the same contains less than 7 1-2 per centum of ammonia; *provided*, that the provisions of this act as to the per centum mentioned in this section shall not apply to meal manufactured from sea-island cotton-seed; but the Commissioner of Agriculture shall, upon the passage of this act, fix and make public a minimum per centum, which shall control as to the cotton seed meal referred to in this proviso; *provided further*, that if any cotton-seed meal shall not analyze up to the required per centum of ammonia, the same may be offered for sale as second-class meal, provided the analysis be made known to the purchaser and stamped on the sack.

Sec. II. Be it further enacted by the authority aforesaid, That there shall be branded upon or attached to each sack, barrel or package of cotton-seed meal offered for sale in this State the true analysis as determined by the State Chemist, and the number of pounds net in each sack, barrel or package.

Sec. III. Be it further enacted by the authority aforesaid, That it



JUSTICES OF THE SUPREME COURT.

1. T. J. SIMMONS, Chief Justice.
2. SAMUEL LUMPKIN, Associate Justice.
3. W. A. LITTLE, " "
4. WM. H. FISH, " "
5. ANDREW J. COBB, " "
6. H. T. LEWIS, " "

shall be the duty of the Commissioner of Agriculture to take all steps necessary to make effective the provisions of sections 1 and 2 of this act.

Sec. IV. Be it further enacted by the authority aforesaid, That any person or persons violating the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction shall be punished as prescribed in section 4810 of the Code of 1882.

Sec. V. Be it further enacted by the authority aforesaid, That all laws and parts of laws in conflict with this act be, and the same are, hereby repealed.

Approved July 22, 1891.

BLALOCK BILL.

COMMERCIAL FERTILIZERS—HOW BRANDED AND GRADED.

No. 358.

An act to prescribe three grades of complete commercial fertilizers, for the branding of same upon each sack or package of fertilizers, and for other purposes.

Section I. Be it enacted by the General Assembly of Georgia, That from and after the passage of this act it shall be unlawful to sell any complete commercial fertilizer in this State unless the grade of same is branded upon each sack or package thereof in letters of not less than one inch.

Sec. II. Be it further enacted, That the grades of such fertilizer shall be divided into three, to wit: "High grade," which shall contain not less than fourteen per cent. of plant food; "Standard grade," which shall contain not less than twelve per cent. of plant food, and "Low grade," which shall contain not less than ten per cent. of plant food; *provided*, this act shall not go into effect until after the first day of August, 1898.

Sec. III. Be it further enacted, That a failure to comply with the requirements of this act shall subject the seller thereof to all the pains and penalties now of force for failure to have fertilizers properly inspected.

Sec. IV. Be it further enacted, That all laws and parts of laws in conflict with this act be, and the same are, hereby repealed.

Approved December 21, 1897.

COMMERCIAL FERTILIZERS, HOW BRANDED, ETC.

No. 170.

An act to amend section 1 of an act entitled "an act to prescribe three grades of complete commercial fertilizers, for the branding of the same upon each sack or package of fertilizers, and for other pur-

poses"; so as to make it unlawful to sell any commercial fertilizers in this State unless the grade of same is branded upon each sack or package thereof in letters not less than one inch.

Section I. Be it enacted by the General Assembly of Georgia, That from and after the passage of this act, the above recited section be, and the same is, hereby amended by striking from the third line of said section the word "complete," so that when amended, said section shall read as follows: Be it enacted by the General Assembly of Georgia, That from and after the passage of this act, it shall be unlawful to sell any commercial fertilizers in this State unless the grade of same is branded upon each sack or package thereof in letters not less than one inch; *provided*, that this act shall not be construed as applying to cotton seed meal and German kainit and muriate of potash; and that said act shall not go into effect until the first day of August, 1899.

Sec. II. Be it further enacted, That all laws and parts of laws in conflict with this act be, and the same are, hereby repealed.

Approved December 22, 1898.

ELLINGTON BILL.

No. 168.

An act to regulate the sale of fertilizers in this State; to fix a method for determining the value of the same, and for other purposes.

Section I. Be it enacted by the General Assembly of Georgia, and it is hereby enacted by authority of the same, That from and after the passage of this act it shall be lawful for any purchaser of fertilizer from any owner thereof, or agent of such owner, to require of the person selling, and at the time of sale or delivery, to take from each lot of each brand sold a sample of its contents.

Sec. II. Be it further enacted, That said sample so taken shall be mixed together and placed in a bottle, jar or such other receptacle as the purchaser may present. It shall then be the duty of such purchaser and seller to deliver said package to the Ordinary of the county, who shall label same with the names of the parties and of the fertilizers.

Sec. III. Be it further enacted, That said Ordinary shall safely keep said package, allowing neither party access to the same, save as herein-after provided. The Ordinary shall receive a fee of ten (10) cents from the party depositing such sample for each sample so deposited.

Sec. IV. Be it further enacted, That should said purchaser, after having used such fertilizers upon his crops, have reason to believe from the yields thereof that said fertilizer was totally or partially worthless, he shall notify the seller and apply to the Ordinary to forward the said sample deposited with him (or a sufficiency thereof to insure a fair analysis) to the State Chemist, without stating the names of the parties, the name of the fertilizer or giving its guaranteed analysis, the cost of sending being prepaid by the purchaser.

Sec. V. Be it further enacted, That it shall be the duty of said State Chemist to analyze and send a copy of the result to said Ordinary.

Sec. VI. Be it further enacted, That should said analysis show that said fertilizer comes up to the guaranteed analysis upon which it is sold, then the statement so sent by the State Chemist shall be conclusive evidence against a plea of partial or total failure of consideration. But should said analysis show that such fertilizer does not come up to the guaranteed analysis, then the sale shall be illegal, null and void, and when suit is brought, upon any evidence of indebtedness given for such fertilizer, the statement of such State Chemist, so transmitted to the Ordinary, shall be conclusive evidence of the facts, whether such evidence of indebtedness is held by an innocent third party or not.

Sec. VII. Be it further enacted, That in lieu of the State Chemist, should the parties to the contract agree upon some other chemist to make said analysis, all the provisions of the act shall apply to his analysis and report to the Ordinary.

Sec. VIII. Be it further enacted, That should the seller refuse to take said sample when so requested by the purchaser, then upon proof of this fact the purchaser shall be entitled to his plea of failure of consideration and to support the same by proof of the want of effect and benefit of said fertilizer upon his crops, which proof shall be sufficient to authorize the jury to sustain defendant's plea within whole or in part, whether said suit is brought by an innocent holder or not.

Sec. IX. Be it further enacted, That all laws and parts of laws in conflict with this act be, and the same are, hereby repealed.

Approved December 27, 1890.

ILLUMINATING OILS.

All illuminating oils must be inspected by an officer appointed for that purpose, and the Department of Agriculture is charged with the supervision and enforcement of the inspection laws concerning fertilizers and oils.

The following is the new Georgia oil law of 1899:

NEW GEORGIA OIL LAW.

AN ACT.

To prescribe the method of testing illuminating oils in this State, and the manner in which test shall be made, and to provide for the appointment of a General Inspector to aid in the inspection of such oils, and for other purposes.

Section 1. Be it enacted by the General Assembly of Georgia, and it is hereby enacted by authority of the same, That from and after the passage of this act it shall be the duty of the Commissioner of Agriculture of the State of Georgia to appoint a General Inspector of Oils of

said State, whose duty it shall be to go from point to point about the State at the direction of the Commissioner of Agriculture to inspect such oils as may be desired, instruct the local inspectors in the art of taking fair, correct and impartial samples of oils for illuminating purposes, and to test the same under provisions of this act; to check up all accounts and books of account of local oil inspectors, and to see that said moneys due the State from fees paid for oil inspections are paid into the State treasury, and to see that said local oil inspectors fairly, correctly and impartially discharge the duties imposed upon them by this act, and existing laws not in conflict herewith, and perform such other duties as may be prescribed by the Commissioner of Agriculture. If any dispute arises as to the test of any oils, then said General Inspector shall take a fair sample of said oil and forward it to the State Chemist, who shall make a final test and his decision shall control in all matters of dispute. Said General Inspector shall be paid a salary not to exceed (\$100.00) one hundred dollars per month and actual and necessary traveling expenses while in discharge of his duties, and said salary and traveling expenses shall be paid out of the fees collected from oil, inspections; provided, however, that this act shall not be in conflict with sections 1579-1584 and other sections of the Code of Georgia providing for the appointment and compensation of local oil inspectors.

Sec. 2. Be it further enacted by the authority aforesaid, That no person shall manufacture, or have in his possession, or sell, or give away for illuminating or heating purposes, in lamp or stoves within the State, any oil or burning fluid wholly or partly composed of naphtha, coal oil, petroleum or products thereof, or of other substances or material emitting an inflammable vapor, which will flash at a temperature below 100 degrees Fahrenheit, when tested in the closed oil tester, known as the New York State, or Elliott Oil Tester, according to the following formula, to wit: Fill the water bath with fresh well or hydrant water up to the lead mark on the inside; then immerse the oil cup in the water and pour in oil, so as to fill the cup up to within one-eighth of an inch of the flange. Take a piece of blotting paper, and remove all air bubbles from the surface of the oil by lightly touching them with the paper. Next, carefully, with a dry towel or cloth, wipe the upper inner parts of the oil cup, so as to remove any drops of oil that might have spattered on the upper part of the cup. Then put on the glass cover of the oil cup, pass the thermometer through the hole in the cork to such a point that the mercury bulb will just be covered by the surface of the oil. Next light the lamp and introduce it under the water bath. So adjust the flame that the temperature will rise at the rate of two degrees a minute. Wait until the temperature reaches ninety-nine degrees F.; then light a wooden toothpick and pass the flame through the semi-circular opening in the glass plate at such an angle as to clear glass cover and to a distance about half way between the oil and the cover. The motion should be steady and uniform, rapid and without pause. The appearance of a slight bluish flame shows that the flashing point has been reached. If the oil flashes at this point it should be branded "State



HON. CLARK HOWELL, PRESIDENT OF THE GEORGIA SENATE.

of Georgia. Rejected." If it does not flash at this point it should be branded "State of Georgia. Approved." Naphtha and illuminating products of petroleum which will not stand the flash test required by this section may be used for illuminating or heating purposes only in the following cases:

1st. In street lamps and open air receptacles, apart from any buildings, factory or inhabited houses in which the vapor is burned.

2d. In dwellings, factories or other places of business, when vaporized in secure tanks or metal generators, made for the purpose, in which the vapor so generated is used for lighting or heating.

3d. For use in the manufacture of illuminating gas in gas manufactories situated apart from dwellings and other buildings. The inspector shall provide at his own expense instruments for testing oil, and stencils for branding packages to read thus: "State of Georgia. Approved," with name of inspector and date of inspection. The inspector shall brand all oils and fluids falling below 100 degrees flash test, in the Elliott tester, "State of Georgia. Rejected," with name of inspector and date of inspection. If the inspector shall find any illuminating oil or fluid under the flash test required by law, or falsely branded, he shall cause the offender to be prosecuted.

Sec. 3. And it is hereby made the duty of such General Inspector of Oils to personally prosecute each and every offender under the provisions of this act, and upon conviction such offender shall be punished as prescribed in section 1039 of the Code of Georgia, and all fines arising from prosecution under this act shall be paid into and become a part of the general educational fund of this State.

Sec. 4. Be it further enacted, That all laws and parts of laws in conflict with this act be, and the same are, hereby repealed.

Approved December 20, 1899.

The organic law of the State is its constitution, which we here append:

CONSTITUTION OF THE STATE OF GEORGIA.

BILL OF RIGHTS.

PREAMBLE.

To perpetuate the principles of free government, insure justice to all, preserve peace, promote the interest and happiness of the citizen, and transmit to posterity the enjoyment of liberty, we, the people of Georgia, relying up the protection and guidance of Almighty God, do ordain and establish this Constitution:

ARTICLE I.

Section I.

Paragraph I. All government, of right, originates with the people, is founded upon their will only, and is instituted solely for the good

of the whole. Public officers are the trustees and servants of the people, and at all times amenable to them.

Par. II. Protection to person and property is the paramount duty of government, and shall be impartial and complete.

Par. III. No person shall be deprived of life, liberty or property, except by due process of law.

Par. IV. No person shall be deprived of the right to prosecute or defend his own cause in any of the courts of this State in person, by attorney or both.

Par. V. Every person charged with an offense against the laws of this State shall have the privilege and benefit of counsel; shall be furnished, on demand, with a copy of the accusation, and a list of the witnesses on whose testimony the charge against him is founded; shall have compulsory process to obtain the testimony of his own witnesses; shall be confronted with the witnesses testifying against him, and shall have a public and speedy trial by an impartial jury.

Par. VI. No person shall be compelled to give testimony tending in any way to criminate himself.

Par. VII. Neither banishment beyond the limits of the State, nor whipping, as a punishment for crime, shall be allowed.

Par. VIII. No person shall be put in jeopardy of life, or liberty, more than once for the same offense save on his, or her, own motion for a new trial after conviction, or in case of mistrial.

Par. IX. Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishment inflicted; nor shall any person be abused in being arrested, while under arrest or in prison.

Par. X. No person shall be compelled to pay costs, except after conviction on final trial.

Par. XI. The writ of *habeas corpus* shall not be suspended.

Par. XII. All men have the natural and inalienable right to worship God, each according to the dictates of his own conscience, and no human authority should in any case, control or interfere with such right of conscience.

Par. XIII. No inhabitant of this State shall be molested in person or property, or prohibited from holding any public office or trust, on account of his religious opinions; but the right of liberty of conscience shall not be so construed as to excuse acts of licentiousness, or justify practices inconsistent with the peace and safety of the State.

Par. XIV. No money shall ever be taken from the public treasury, directly or indirectly, in aid of any church, sect or denomination of religionists, or of any sectarian institution.

Par. XV. No law shall ever be passed to curtail, or restrain, the liberty of speech, or of the press; any person may speak, write and publish his sentiments on all subjects, being responsible for the abuse of that liberty.

Par. XVI. The right of the people to be secure in their persons, houses, papers and effects against unreasonable searches and seizures shall not be violated; and no warrant shall issue except upon probable

cause, supported by oath, or affirmation, particularly describing the place, or places, to be searched, and the person or things to be seized.

Par. XVII. There shall be within the State of Georgia neither slavery nor involuntary servitude, save as a punishment for crime after legal conviction thereof.

Par. XVIII. The social status of the citizen shall never be the subject of legislation.

Par. XIX. The civil authority shall be superior to the military, and no soldier shall, in time of peace, be quartered in any house without the consent of the owner, nor in time of war, except by the civil magistrate, in such manner as may be provided by law.

Par. XX. The power of the courts to punish for contempts shall be limited by legislative acts.

Par. XXI. There shall be no imprisonment for debt.

Par. XXII. The right of the people to keep and bear arms shall not be infringed, but the General Assembly shall have power to prescribe the manner in which arms may be borne.

Par. XXIII. The legislative, judicial and executive powers shall forever remain separate and distinct, and no person discharging the duties of one shall at the same time exercise the functions of either of the others, except as herein provided.

Par. XXIV. The people have the right to assemble peaceably for their common good, and to apply to those vested with the powers of government for redress of grievances by petition or remonstrance.

Par. XXV. All citizens of the United States, resident in this State, are hereby declared citizens of this State; and it shall be the duty of the General Assembly to enact such laws as will protect them in the full enjoyment of the rights, privileges and immunities due to such citizenship.

Section II.

Paragraph I. In all prosecutions or indictments for libel, the truth may be given in evidence; and the jury in all criminal cases shall be the judges of the law and the facts. The power of the judges to grant new trials in case of conviction is preserved.

Par. II. Treason against the State of Georgia shall consist in levying war against her, adhering to her enemies, giving them aid and comfort. No person shall be convicted of treason except on the testimony of two witnesses to the same overt act, or confession in open court.

Par. III. No conviction shall work corruption of blood, or forfeiture of estate.

Par. IV. All lotteries, and the sale of lottery tickets, are hereby prohibited; and this prohibition shall be enforced by penal laws.

Par. V. Lobbying is declared to be a crime, and the General Assembly shall enforce this provision by suitable penalties.

Par. VI. The General Assembly shall have the power to provide for the punishment of fraud; and shall provide, by law, for reaching property of the debtor concealed from the creditor.

Section III.

Paragraph I. In cases of necessity, private ways may be granted upon just compensation being first paid by the applicant. Private property shall not be taken, or damaged, for public purposes, without just and adequate compensation being first paid.

Par. II. No bill of attainder, *ex post facto* law, retroactive law or law impairing the obligation of contracts or making irrevocable grants of special privileges or immunities, shall be passed.

Par. III. No grant of special privileges or immunities shall be revoked, except in such manner as to work no injustice to the corporators or creditors of the incorporation.

Section IV.

Paragraph 1. Laws of a general nature shall have uniform operation throughout the State, and no special law shall be enacted in any case for which provision has been made by an existing general law. No general law affecting private rights shall be varied in any particular case by special legislation, except with the free consent, in writing, of all persons affected thereby; and no person under legal disability to contract is capable of such consent.

Par. II. Legislative acts in violation of this constitution, or the constitution of the United States, are void, and the judiciary shall so declare them.

Section V.

Paragraph I. The people of this State have the inherent, sole and exclusive right of regulating their internal government, and the police thereof, and of altering and abolishing their constitution whenever it may be necessary to their safety and happiness.

Par. II. The enumeration of rights herein contained, as a part of this constitution shall not be construed to deny to the people any inherent rights which they may have hitherto enjoyed.

ARTICLE II.

ELECTIVE FRANCHISE.

Section I.

Paragraph I. In all elections by the people the electors shall vote by ballot.

Par. II. Every male citizen of the United States (except as hereinafter provided), twenty-one years of age, who shall have resided in this State one year next preceding the election, and shall have resided six months in the county in which he offers to vote, and shall have paid all taxes which may hereafter be required of him, and which he may



HON. JOHN D. LITTLE,
Speaker of the House of Representatives.

have had an opportunity of paying, agreeable to law, except for the year of the election, shall be deemed an elector; *provided*, that no soldier, sailor or marine in the military or naval service of the United States shall acquire the rights of an elector by reason of being stationed on duty in this State; and no person shall vote who, if challenged, shall refuse to take the following oath or affirmation: "I do swear (or affirm) that I am twenty-one years of age, have resided in this State one year and in this county six months, next preceding this election. I have paid all taxes which, since the adoption of the present constitution of this State, have been required of me previous to this year, and which I have had an opportunity to pay, and I have not voted at this election."

Section II.

Paragraph I. The General Assembly may provide, from time to time, for the registration for all electors, but the following classes of persons shall not be permitted to register, vote or hold any office, or appointment of honor or trust in this State, to wit: 1st. Those who shall have been convicted, in any court of competent jurisdiction, of treason against the State, or embezzlement of public funds, malefeasance in office, bribery or larceny, or of any crime involving moral turpitude, punishable by laws of this State with imprisonment in the penitentiary, unless such person shall have been pardoned. 2d. Idiots and insane persons.

Section III.

Paragraph I. Electors shall, in all cases except for treason, felony, larceny and breach of the peace, be privileged from arrest during their attendance on elections, and in going to and returning from the same.

Section IV.

Paragraph I. No person who is the holder of any public money, contrary to law, shall be eligible to any office in this State until the same is accounted for and paid into the treasury.

Par. II. No person who, after the adoption of this constitution, being a resident of this State, shall have been convicted of fighting a duel in this State, or convicted of sending or accepting a challenge, or convicted of aiding or abetting such duel, shall hold office in this State, unless he shall have been pardoned; and every such person shall also be subject to such punishment as may be prescribed by law.

Section V.

Paragraph I. The General Assembly shall, by law, forbid the sale, distribution or furnishing of intoxicating drinks within two miles of election precincts on days of election—State, county or municipal—and prescribe punishment for any violation of the same.

Section VI.

Paragraph I. Returns of elections for all civil officers elected by the people, who are to be commissioned by the Governor, and also for the members of the General Assembly, shall be made to the Secretary of State, unless otherwise provided by law.

ARTICLE III.

LEGISLATIVE DEPARTMENT.

Section I.

Paragraph I. The legislative power of the State shall be vested in a General Assembly, which shall consist of a Senate and House of Representatives.

Section II.

Paragraph I. The Senate shall consist of forty-four members. There shall be forty-four Senatorial districts as now arranged by counties. Each district shall have one Senator.

The First Senatorial District shall be composed of the counties of Chatham, Bryan and Effingham.

The Second Senatorial District shall be composed of the counties of Liberty, Tattnall and McIntosh.

The Third Senatorial District shall be composed of the counties of Wayne, Pierce and Appling.

The Fourth Senatorial District shall be composed of the counties of Glynn, Camden and Charlton.

The Fifth Senatorial District shall be composed of the counties of Coffee, Ware and Clinch.

The Sixth Senatorial District shall be composed of the counties of Echols, Lowndes and Berrien.

The Seventh Senatorial District shall be composed of the counties of Brooks, Thomas and Colquitt.

The Eighth Senatorial District shall be composed of the counties of Decatur, Mitchell and Miller.

The Ninth Senatorial District shall be composed of the counties of Early, Calhoun and Baker.

The Tenth Senatorial District shall be composed of the counties of Dougherty, Lee and Worth.

The Eleventh Senatorial District shall be composed of the counties of Clay, Randolph and Terrell.

The Twelfth Senatorial District shall be composed of the counties of Stewart, Webster and Quitman.

The Thirteenth Senatorial District shall be composed of the counties of Sumter, Schley and Macon.

The Fourteenth Senatorial District shall be composed of the counties of Dooly, Wilcox, Pulaski and Dodge.

The Fifteenth Senatorial District shall be composed of the counties of Montgomery, Telfair and Irwin.

The Sixteenth Senatorial District shall be composed of the counties of Laurens, Emanuel and Johnson.

The Seventeenth Senatorial District shall be composed of the counties of Screven, Bulloch and Burke.

The Eighteenth Senatorial District shall be composed of the counties of Richmond, Glascock and Jefferson.

The Nineteenth Senatorial District shall be composed of the counties of Taliaferro, Greene and Warren.

The Twentieth Senatorial District shall be composed of the counties of Baldwin, Hancock and Washington.

The Twenty-first Senatorial District shall be composed of the counties of Twiggs, Wilkinson and Jones.

The Twenty-second Senatorial District shall be composed of the counties of Bibb, Monroe and Pike.

The Twenty-third Senatorial District shall be composed of the counties of Houston, Crawford and Taylor.

The Twenty-fourth Senatorial District shall be composed of the counties of Muscogee, Marion and Chattahoochee.

The Twenty-fifth Senatorial District shall be composed of the counties of Harris, Upson and Talbot.

The Twenty-six Senatorial District shall be composed of the counties of Spalding, Butts and Fayette.

The Twenty-seventh Senatorial District shall be composed of the counties of Newton, Walton, Clarke, Oconee and Rockdale.

The Twenty-eighth Senatorial District shall be composed of the counties of Jasper, Putnam and Morgan.

The Twenty-ninth Senatorial District shall be composed of the counties of Wilkes, Columbia, Lincoln and McDuffie.

The Thirtieth Senatorial District shall be composed of the counties of Oglethorpe, Madison and Elbert.

The Thirty-first Senatorial District shall be composed of the counties of Hart, Habersham and Franklin.

The Thirty-second Senatorial District shall be composed of the counties of White, Dawson and Lumpkin.

The Thirty-third Senatorial District shall be composed of the counties of Hall, Banks and Jackson.

The Thirty-fourth Senatorial District shall be composed of the counties of Gwinnett, DeKalb and Henry.

The Thirty-fifth Senatorial District shall be composed of the counties of Clayton, Cobb and Fulton.

The Thirty-sixth Senatorial District shall be composed of the counties of Campbell, Coweta, Meriwether and Douglas.

The Thirty-seventh Senatorial District shall be composed of the counties of Carroll, Heard and Troup.

The Thirty-eighth Senatorial District shall be composed of the counties of Haralson, Polk and Paulding.

The Thirty-ninth Senatorial District shall be composed of the counties of Milton, Cherokee and Forsyth.

The Fortieth Senatorial District shall be composed of the counties of Union, Towns and Rabun.

The Forty-first Senatorial District shall be composed of the counties of Pickens, Fannin and Gilmer.

The Forty-second Senatorial District shall be composed of the counties of Bartow, Floyd and Chattooga.

The Forty-third Senatorial District shall be composed of the counties of Murray, Gordon and Whitfield.

The Forty-fourth Senatorial District shall be composed of the counties of Walker, Dade and Catoosa.

Par. III. The General Assembly may change these districts after each census of the United States; *provided*, that neither the number of districts nor the number of Senators from each district shall be increased.

Section III.

Paragraph I. The House of Representatives shall consist of one hundred and seventy-five Representatives, apportioned among the several counties as follows, to wit: To the six counties having the largest population, viz.: Chatham, Richmond, Burke, Floyd, Bibb and Fulton, three Representatives each; to the twenty-six counties having the next largest population, viz.: Dooly, Bartow, Coweta, Decatur, Houston, Greene, Gwinnett, Harris, Jefferson, Meriwether, Monroe, Muscogee, Pulaski, DeKalb, Hall, Walton, Sumter, Thomas, Troup, Washington, Hancock, Carroll, Cobb, Jackson, Oglethorpe and Wilkes, two Representatives each; and to the remaining one hundred and five counties one Representative each.

Par. II. The above apportionment shall be changed by the General Assembly at its first session after each census taken by the United States Government, so as to give the six counties having the largest population three Representatives each; and to the twenty-six counties having the next largest population two Representatives each; but in no event shall the aggregate number of Representatives be increased.*

* According to the provision of this paragraph the apportionment by the new census will be as follows:

Fulton, Chatham, Richmond, Bibb, Floyd, Thomas, three representatives each.
Burke, Muscogee, Decatur, Washington, Carroll, Dooly, Sumter, Laurens, Gwinnett, Coweta, Cobb, Jackson, Troup, Meriwether, Houston, Bulloch, Emanuel, DeKalb, Walton, Wilkes, Bartow, Hall, Monroe, Tattnall, Lowndes, Elbert, two representatives each.

The remaining one hundred and five counties, one representative.

The counties are here arranged in the order of population.



GEORGIA WHEATFIELD.



Section IV.

Paragraph I. The members of the General Assembly shall be elected for two years, and shall serve until their successors are elected.

Par. II. The first election for members of the General Assembly, under this constitution, shall take place on the first Wednesday in December, 1877; the second election for the same shall be held on the first Wednesday in October, 1880, and subsequent elections biennially on that day, until the day of election is changed by law.

Par. III. The first meeting of the General Assembly, after the ratification of this constitution, shall be on the fourth Wednesday in October, 1878, and annually thereafter, on the same day, until the day shall be changed by law. But nothing herein contained shall be construed to prevent the Governor from calling an extra session of the General Assembly before the first Wednesday in November, 1878, if, in his opinion, the public good shall require it.

Par. IV. A majority of each House shall constitute a quorum to transact business; but a smaller number may adjourn from day to day and compel the presence of its absent members, as each House may provide.

Par. V. Each Senator and Representative, before taking his seat, shall take the following oath, or affirmation, to wit: "I will support the constitution of this State, and of the United States; and on all questions and measures which may come before me, I will so conduct myself as will, in my judgment, be most conducive to the interests and prosperity of this State."

Par. VI. No session of the General Assembly shall continue longer than fifty days; *provided*, that if an impeachment trial be pending at the end of fifty days, the session may be prolonged till the completion of said trial.

Par. VII. No person holding a military commission or other appointment or office, having any emolument or compensation annexed thereto, under this State, or the United States, or either of them, except justices of the peace and officers of the militia, nor any defaulter for public money, or for any legal taxes required of him, shall have a seat in either House; nor shall any Senator or Representative, after his qualification as such, be elected by the General Assembly, or appointed by the Governor, either with or without the advice and consent of the Senate, to any office or appointment having any emolument annexed thereto, during the time for which he shall have been elected.

Par. VIII. The seat of a member of either House shall be vacated on his removal from the district or county from which he was elected.

Section V.

Paragraph I. The Senators shall be citizens of the United States, who have attained the age of twenty-five years, and who shall have been citizens of this State for four years, and for one year residents of the district from which elected.

Par. II. The presiding officer of the Senate shall be styled the President of the Senate, and shall be elected *viva voce* from the Senators.

Par. III. The Senate shall have the sole power to try impeachments.

Par. IV. When sitting for that purpose, the members shall be on oath or affirmation, and shall be presided over by the Chief Justice or the presiding Justice of the Supreme Court. Should the Chief Justice be disqualified, the Senate shall elect the Judge of the Supreme Court to preside. No person shall be convicted without the concurrence of two-thirds of the members present.

Par. V. Judgments, in case of impeachment, shall not extend further than removal from office and disqualification to hold and enjoy any office of honor, trust or profit, within this State; but the party shall, nevertheless, be liable and subject to indictment, trial, judgment and punishment according to law.

Section VI.

Paragraph I. The Representatives shall be citizens of the United States, who have attained the age of twenty-one years, and who shall have been citizens of this State for two years, and for one year residents of the counties from which elected.

Par. II. The presiding officer of the House of Representatives shall be styled the Speaker of the House of Representatives, and shall be elected *viva voce* from the body.

Par. III. The House of Representatives shall have the sole power to impeach all persons who shall have been, or may be, in office.

Section VII.

Paragraph I. Each House shall be the judge of the election, returns and qualifications of its members, and shall have power to punish them for disorderly behavior, or misconduct, by censure, fine, imprisonment, or expulsion; but no member shall be expelled, except by a vote of two-thirds of the House to which he belongs.

Par. II. Each House may punish by imprisonment, not extending beyond the session, any person, not a member, who shall be guilty of a contempt, by any disorderly behavior in its presence, or who shall rescue, or attempt to rescue, any person arrested by order of either House.

Par. III. The members of both Houses shall be free from arrest during their attendance on the General Assembly and in going thereto or returning therefrom, except for treason, felony, larceny, or breach of the peace; and no member shall be liable to answer in any other place for anything spoken in debate in either House.

Par. IV. Each House shall keep a journal of its proceedings, and publish it immediately after its adjournment.

Par. V. The original journal shall be preserved, after publication, in the office of Secretary of State, but there shall be no other record thereof.

Par. VI. The yeas and nays on any question shall, at the desire of one-fifth of the members present, be entered on the journal.

Par. VII. Every bill, before it shall pass, shall be read three times, and on three separate days, in each House, unless in case of actual invasion or insurrection. But the first and second reading of each local bill and bank and railroad charters in each House shall consist of the reading of the title only, unless said bill is ordered to be engrossed.

Par. VIII. No law or ordinance shall pass which refers to more than one subject-matter, or contains matter different from what is expressed in the title thereof.

Par. IX. The general appropriation bill shall embrace nothing except appropriations fixed by previous laws, the ordinary expenses of the Executive, Legislative and Judicial Departments of the Government, payment of the public debt and interest thereon, and the support of the public institutions and educational interests of the State. All other appropriations shall be made by separate bills, each embracing but one subject.

Par. X. All bills for raising revenue or appropriating money shall originate in the House of Representatives, but the Senate may propose or concur in amendments as in other bills.

Par. XI. No money shall be drawn from the treasury except by appropriation made by law, and a regular statement and account of the receipt and expenditure of all public money shall be published every three months, and also with the laws passed by each session of the General Assembly.

Par. XII. No bill or resolution appropriating money shall become a law, unless, upon its passage, the yeas and nays, in each House, are recorded.

Par. XIII. All acts shall be signed by the President of the Senate and the Speaker of the House of Representatives, and no bill, ordinance or resolution, intended to have the effect of law, which shall have been rejected by either House, shall be again proposed during the same session, under the same or any other title, without the consent of two-thirds of the House by which the same was rejected.

Par. XIV. No bill shall become a law unless it shall receive a majority of the votes of all the members elected to each House of the General Assembly, and it shall, in every instance, so appear on the journal.

Par. XV. (By an act approved September 24, 1885, an amendment to the constitution was submitted to vote of the people in October, 1886, and adopted, whereby the original of this paragraph was stricken from this constitution.)

Par. XVI. No local or special bill shall be passed, unless notice of the intention to apply therefor shall have been published in the locality where the matter, or thing to be affected, may be situated, which notice shall be given at least thirty days prior to the introduction of such bill into the General Assembly and in the manner to be prescribed by law. The evidence of such notice having been published shall be exhibited in the General Assembly before such act shall be passed.

Par. XVII. No law, or section of the Code, shall be amended or repealed by mere reference to its title, or to the number of the section of the Code, but the amending or repealing act shall distinctly describe the law to be amended or repealed, as well as the alteration to be made.

Par. XVIII. The General Assembly shall have no power to grant corporate powers and privileges to private companies; nor to make or change election precincts; nor to establish bridges or ferries; nor to change names of legitimate children; but it shall prescribe by law the manner in which such powers shall be exercised by the courts. All corporate powers and privileges to banking, insurance, railroad, canal, navigation, express and telegraph companies shall be issued and granted by the Secretary of State, in such manner as shall be prescribed by law.

Par. XIX. The General Assembly shall have no power to relieve principals or securities upon forfeited recognizances, from the payment thereof, either before or after judgment thereon, unless the principal in the recognizance shall have been apprehended and placed in the custody of the proper officer.

Par. XX. The General Assembly shall not authorize the construction of any street passenger railway within the limits of any incorporated town or city without the consent of the corporate authorities.

Par. XXI. Whenever the constitution requires a vote of two-thirds of either or both Houses for the passage of an act or resolution, the yeas and nays on the passage thereof shall be entered on the journal.

Par. XXII. The General Assembly shall have power to make all laws and ordinances consistent with this constitution, and not repugnant to the constitution of the United States, which they shall deem necessary and proper for the welfare of the State.

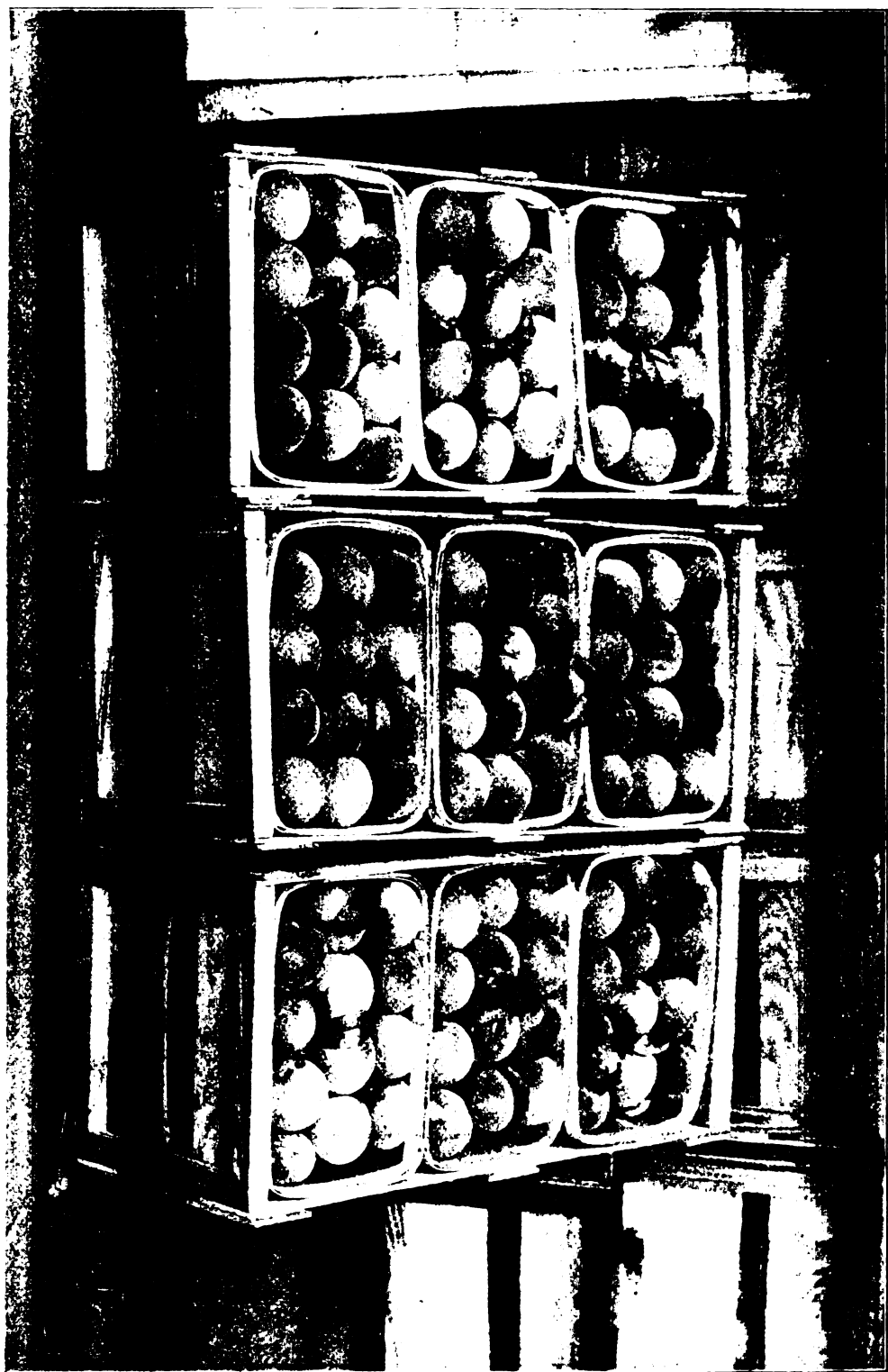
Par. XXIII. No provision in this constitution, for a two-thirds' vote of both Houses of the General Assembly, shall be construed to waive the necessity for the signature of the Governor, as in any other case, except in the case of the two-thirds' vote required to override the veto, and in case of prolongation of a session of the General Assembly.

Par. XXIV. Neither House shall adjourn for more than three days, or to any other place, without the consent of the other; and in case of a disagreement between the two Houses on a question of adjournment, the Governor may adjourn either or both of them.

Section VIII.

Paragraph I. The officers of the two Houses, other than the President and Speaker, shall be a Secretary of the Senate and Clerk of the House of Representatives, and such assistants as they may appoint; but the clerical expenses of the Senate shall not exceed sixty dollars per day for each session, nor those of the House of Representatives seventy dollars per day for each session. The Secretary of the Senate and Clerk of the House of Representatives shall be required to give bond and security for the faithful discharge of their respective duties.

PACKED PEACHES.



Section IX.

Paragraph I. The *per diem* of members of the General Assembly shall not exceed four dollars, and mileage shall not exceed ten cents for each mile traveled, by the nearest practicable route in going to and returning from the Capital; but the President of the Senate and the Speaker of the House of Representatives shall each receive not exceeding seven dollars per day.

Section X.

Paragraph I. All elections by the General Assembly shall be *viva voce*, and the vote shall appear on the journal of the House of Representatives. When the Senate and House of Representatives unite for the purpose of elections, they shall meet in the Representative Hall, and the President of the Senate shall, in such cases, preside and declare the result.

Section XI.

Paragraph I. All property of the wife at the time of her marriage, and all property given to, inherited or acquired by her, shall remain her separate property, and not be liable for the debts of her husband.

Section XII.

Paragraph I. All life insurance companies now doing business in this State, or which may desire to establish agencies and do business in the State of Georgia, chartered by other States of the Union, or foreign States, shall show that they have deposited with the Comptroller-General of the State in which they are chartered or of this State, the Insurance Commissioners, or such other officer as may be authorized to receive it, not less than one hundred thousand dollars, in such securities as may be deemed by such officer equivalent to cash, subject to his order, as a guarantee fund for the security of policy-holders.

Par. II. When such showing is made to the Comptroller-General of the State of Georgia by a proper certificate from the State official having charge of the funds so deposited, the Comptroller-General of the State of Georgia is authorized to issue to the company making such showing a license to do business in the State, upon paying the fees required by law.

Par. III. All life insurance companies chartered by the State of Georgia, or which may hereafter be chartered by the State, shall, before doing business, deposit with the Comptroller-General of the State of Georgia, or with some strong corporation, which may be approved by said Comptroller-General, one hundred thousand dollars, in such securities as may be deemed by him equivalent to cash, to be subject to his order, as a guarantee fund for the security of the policy-holders of the company making such deposit, all interests and dividends arising from such securities to be paid, when due, to the company so depositing. Any

such securities as may be needed or desired by the company may be taken from said department at any time by replacing them with other securities equally acceptable to the Comptroller-General, whose certificate for the same shall be furnished to the company.

Par. IV. The General Assembly shall, from time to time enact laws to compel all fire insurance companies doing business in this State, whether chartered by this State or otherwise, to deposit reasonable securities with the Treasurer of this State, to secure the people against loss by the operations of said companies.

Par. V. The General Assembly shall compel all insurance companies in this State, or doing business therein, under proper penalties, to make semi-annual reports to the Governor, and print the same, at their own expense, for the information and protection of the people.

ARTICLE IV.

POWER OF THE GENERAL ASSEMBLY OVER TAXATION.

Section I.

Paragraph I. The right of taxation is a sovereign right, inalienable, indestructible, is the life of the State, and rightfully belongs to the people in all Republican governments, and neither the General Assembly, nor any, nor all other departments of the Government established by this constitution, shall ever have the authority to irrevocably give, grant, limit or restrain this right; and all laws, grants, contracts and all other acts whatsoever, by said Government, or any department thereof, to effect any of these purposes, shall be, and are hereby, declared to be null and void for every purpose whatsoever; and said right of taxation shall always be under the complete control of, and revocable by the State, notwithstanding any gift, grant or contract whatsoever by the General Assembly.

Section II.

Paragraph I. The power and authority regulating railroad freights and passenger tariffs, preventing unjust discriminations, and requiring reasonable and just rates of freight and passenger tariffs, are hereby conferred upon the General Assembly, whose duty it shall be to pass laws, from time to time, to regulate freight and passenger tariffs, to prohibit unjust discriminations on the various railroads of this State, and to prohibit said roads from charging other than just and reasonable rates, and enforce the same by adequate penalties.

Par. II. The exercise of the right of eminent domain shall never be abridged, nor so construed as to prevent the General Assembly from taking the property and franchises of incorporated companies, and subjecting them to public use, the same as property of individuals; and the exercise of the police power of the State shall never be abridged, nor so

construed as to permit corporations to conduct their business in such a manner as to infringe the equal rights of individuals, or the general well-being of the State.

Par. III. The General Assembly shall not remit the forfeiture of the charter of any corporation now existing, nor alter or amend the same, nor pass any other general or special law for the benefit of said corporation, except upon the condition that said corporation shall thereafter hold its charter subject to the provisions of this constitution; and every amendment of any charter of any corporation in this State, or any special law for its benefit, accepted thereby, shall operate as a novation of said charter, and shall bring the same under the provisions of this constitution; *provided*, that this section shall not extend to any amendment for the purpose of allowing any existing road to take stock in, or aid in the building of any branch road.

Par. IV. The General Assembly of this State shall have no power to authorize any corporation to buy shares, or stock, in any other corporation in this State, or elsewhere, or to make any contract or agreement whatever, with any such corporation, which may have the effect, or be intended to have the effect, to defeat or lessen competition in their respective business, or to encourage monopoly; and all such contracts and agreements shall be illegal and void.

Par. V. No railroad company shall give, or pay, any rebate, or *bonus* in the nature thereof, directly or indirectly, or do any act to mislead or deceive the public as to the real rates charged or received for freights or passage; and any such payments shall be illegal and void, and these prohibitions shall be enforced by suitable penalties.

Par. VI. No provision of this article shall be deemed, held or taken to impair the obligation of any contract heretofore made by the State of Georgia.

Par. VII. The General Assembly shall enforce the provisions of this article by appropriate legislation.

ARTICLE V.

EXECUTIVE DEPARTMENT.

Section I.

Paragraph I. The officers of the Executive Department shall consist of a Governor, Secretary of State, Comptroller-General and Treasurer.

Par. II. The executive power shall be vested in a Governor, who shall hold his office during the term of two years, and until his successor shall be chosen and qualified. He shall not be eligible to re-election, after the expiration of a second term, for the period of four years. He shall have a salary of three thousand dollars per annum (until otherwise provided by a law passed by a two-thirds vote of both branches of the General Assembly), which shall not be increased or diminished during the period for which he shall have been elected; nor shall he receive within

that time, any other emolument from the United States, or either of them, or from any foreign power. But this reduction of salary shall not apply to the present term of the present Governor.

Par. III. The first election for Governor, under this constitution, shall be held on the first Wednesday in October, 1880, and the Governor-elect shall be installed in office at the next session of the General Assembly. An election shall take place biennially thereafter on said day, until another date be fixed by the General Assembly. Said election shall be held at the places of holding general elections in the several counties of this State, in the manner prescribed for the election of members of the General Assembly, and the electors shall be the same.

Par. IV. The returns for every election of Governor shall be sealed up by the managers, separately from other returns, and directed to the President of the Senate and Speaker of the House of Representatives, and transmitted to the Secretary of State, who shall, without opening said returns, cause the same to be laid before the Senate on the day after the two Houses shall have been organized, and they shall be transmitted by the Senate to the House of Representatives.

Par. V. The members of each branch of the General Assembly shall convene in the Representative Hall, and the President of the Senate and Speaker of the House of Representatives shall open and publish the returns in the presence and under the direction of the General Assembly; and the person having the majority of the whole number of votes shall be declared duly elected Governor of this State; but if no person shall have such majority, then from the two persons having the highest number of votes, who shall be in life, and shall not decline an election at the time appointed by the General Assembly to elect, the General Assembly shall immediately elect a Governor *viva voce*; and in all cases of election of a Governor by the General Assembly a majority of the members present shall be necessary to a choice.

Par. VI. Contested elections shall be determined by both Houses of the General Assembly in such manner as shall be prescribed by law.

Par. VII. No person shall be eligible to the office of Governor who shall not have been a citizen of the United States fifteen years, and a citizen of the State six years, and who shall not have attained the age of thirty years.

Par. VIII. In case of the death, resignation or disability of the Governor, the President of the Senate shall exercise the executive powers of the government until such disability be removed, or a successor is elected and qualified. And in case of the death, resignation or disability of the President of the Senate, the Speaker of the House of Representatives shall exercise the executive powers of the government until the removal of the disability, or the election and qualification of a Governor.

Par. IX. The General Assembly shall have power to provide by law for filling unexpired terms by special elections.

Par. X. The Governor shall, before he enters on the duties of his office, take the following oath or affirmation: "I do solemnly swear

SCENE IN PEACH ORCHARD.



(or affirm, as the case may be), that I will faithfully execute the office of Governor of the State of Georgia, and will, to the best of my ability, preserve, protect and defend the constitution thereof, and the constitution of the United States of America."

Par. XI. The Governor shall be Commander-in-Chief of the army and navy of this State, and of the militia thereof.

Par. XII. He shall have power to grant reprieves and pardons, to commute penalties, remove disabilities imposed by law, and to remit any part of a sentence for offences against the State, after conviction, except in cases of treason and impeachment, subject to such regulations as may be provided by law relative to the manner of applying for pardons. Upon conviction for treason he may suspend the execution of the sentence and report the case to the General Assembly at the next meeting thereof, when the General Assembly shall either pardon, commute the sentence, direct its execution or grant a further reprieve. He shall, at each session of the General Assembly, communicate to that body each case of reprieve, pardon or commutation granted, stating the name of the convict, the offence for which he was convicted, the sentence and its date, the date of the reprieve, pardon or commutation, and the reasons for granting the same. He shall take care that the laws are faithfully executed, and shall be a conservator of the peace throughout the State.

Par. XIII. He shall issue writs of election to fill all vacancies that may happen in the Senate or House of Representatives, and shall give the General Assembly, from time to time, information of the state of the commonwealth, and recommend to their consideration such measures as he may deem necessary or expedient. He shall have power to convoke the General Assembly on extraordinary occasions, but no law shall be enacted at call sessions of the General Assembly except such as shall relate to the object stated in his proclamation convening them.

Par. XIV. When any office shall become vacant, by death, resignation or otherwise, the Governor shall have power to fill such vacancy, unless otherwise provided by law; and persons so appointed shall continue in office until a successor is commissioned, agreeably to the mode pointed out in the constitution, or by law in pursuance thereof.

Par. XV. A person once rejected by the Senate shall not be reappointed by the Governor to the same office during the same session or the recess thereafter.

Par. XVI. The Governor shall have the revision of all bills passed by the General Assembly, before the same shall become laws, but two-thirds of each House may pass a law, notwithstanding his dissent; and if any bill shall not be returned by the Governor within five days (Sundays excepted) after it has been presented to him, the same shall be a law, unless the General Assembly, by their adjournment, shall prevent its return. He may approve any appropriation, and disapprove any other appropriation, in the same bill, and the latter shall not be effectual, unless passed by two-thirds of each House.

Par. XVII. Every vote, resolution or order, to which the concur-

rence of both Houses may be necessary, except on a question of election or adjournment, shall be presented to the Governor, and before it shall take effect be approved by him, or being disapproved, shall be repassed by two-thirds of each House.

Par. XVIII. He may require information, in writing, from the officers in the Executive Department on any subject relating to the duties of their respective offices. It shall be the duty of the Governor, quarterly, and oftener if he deems it expedient, to examine, under oath, the Treasurer and Comptroller-General of the State on all matters pertaining to their respective offices, and to inspect and review their books and accounts. The General Assembly shall have authority to provide by law for the suspension of either of said officers from the discharge of the duties of his office, and also for the appointment of a suitable person to discharge the duties of the same.

Par. XIX. The Governor shall have power to appoint his own Secretaries, not exceeding two in number, and to provide such other clerical force as may be required in his office, but the total cost for Secretaries and clerical force in his office shall not exceed six thousand dollars per annum.

Section II.

Paragraph I. The Secretary of State, Comptroller-General and Treasurer shall be elected by the persons qualified to vote for members of the General Assembly, at the same time and in the same manner as the Governor. The provision of the constitution as to the transmission of the returns of election, counting the votes, declaring the result, deciding when there is no election and when there is a contested election, applicable to the election of Governor, shall apply to the election of Secretary of State, Comptroller-General and Treasurer; they shall be commissioned by the Governor and hold their office for the same time as the Governor.

Par. II. The salary of the Treasurer shall not exceed two thousand dollars per annum. The clerical expenses of his department shall not exceed sixteen hundred dollars per annum.

Par. III. The salary of the Secretary of State shall not exceed two thousand dollars per annum, and the clerical expenses of his department shall not exceed one thousand dollars per annum.

Par. IV. The salary of the Comptroller-General shall not exceed two thousand dollars per annum. The clerical expenses of his department including the Insurance Department and Wild Land Clerk, shall not exceed four thousand dollars per annum; and without said clerk, it shall not exceed three thousand dollars per annum.

Par. V. The Treasurer shall not be allowed, directly or indirectly, to receive any fee, interest or reward from any person, bank or corporation for the deposit or use, in any manner of the public funds and the General Assembly shall enforce this provision by suitable penalties.

Par. VI. No person shall be eligible to the office of Secretary of State,

Comptroller-General, or Treasurer, unless he shall have been a citizen of the United States for ten years, and shall have resided in this State for six years next preceding his election, and shall be twenty-five years of age when elected. All of said officers shall give bond and security, under regulations to be prescribed by law, for the faithful discharge of their duties.

Par. VII. The Secretary of State, the Comptroller-General and the Treasurer shall not be allowed any fees, perquisite or compensation other than their salaries, as prescribed by law, except their necessary expenses when absent from the seat of government on business for the State.

Section III.

Paragraph I. The Great Seal of the State shall be deposited in the office of the Secretary of State, and shall not be affixed to any instrument of writing except by order of the Governor, or General Assembly, and that now in use shall be the Great Seal of the State until otherwise provided by law.

ARTICLE VI.

JUDICIARY.

Section I.

Paragraph I. The judicial powers of this State shall be vested in a Supreme Court, Superior Courts, Courts of Ordinary, Justice of the Peace, commissioned Notaries Public, and other Courts, as have been or may be established by law.

Section II.

Paragraph I. The Supreme Court shall consist of a Chief Justice and two Associate Justices. A majority of the Court shall constitute a quorum.

Par. II. When one or more of the Judges are disqualified from deciding any case, by interest or otherwise, the Governor shall designate a Judge, or Judges, of the Superior Courts to preside in said case.

Par. III. No Judge of any Court shall preside in any case where the validity of any bond—Federal, State, corporation or municipal—is involved, who holds in his own right, or as the representative of others, any material interests in the class of bonds upon which the question to be decided arises.

Par. IV. The Chief Justice and Associate Justices shall hold their office for six years, and until their successors are qualified. A successor to the incumbent whose term will soonest expire shall be elected by the

General Assembly in 1880; a successor to the incumbent whose term of office is next in duration shall be elected by the General Assembly in 1882; and a successor to the third incumbent shall be elected by the General Assembly in 1884; but appointments to fill vacancies shall only be for the unexpired term, or until such vacancies are filled by elections, agreeably to the mode pointed out by this constitution.

Par. V. The Supreme Court shall have no original jurisdiction, but shall be a Court alone for the trial and correction of errors from the Superior Courts, and from the City Courts of Atlanta and Savannah, and such other like Courts as may be hereafter established in other cities; and shall sit at the seat of government, at such time in each year as shall be prescribed by law, for the trial and determination of writs of error from said Superior and City Courts.

Par. VI. The Supreme Court shall dispose of every case at the first or second term after such writ of error is brought; and in case the plaintiff in error shall not be prepared at the first term to prosecute the case—unless prevented by providential cause—it shall be stricken from the docket, and the judgment below shall stand affirmed.

Par. VII. In any case the Court may, in its discretion, withhold its judgment until the next term after the same is argued.

Par. VIII. *The Supreme Court shall hereafter consist of a Chief Justice and five Associate Justices. The Court shall have power to hear and determine cases when sitting, either in a body or in two divisions of three Judges each, under such regulations as may be prescribed by the General Assembly. A majority of either division shall constitute a quorum for that division. The Chief Justice and the Associate Justices of the Supreme Court shall hereafter be elected by the people at the same time and in the same manner as the Governor and the State house officers are elected, except that the first election under this amendment shall be held on the third Wednesday in December, 1896, at which time one Associate Justice shall be elected for a full term of six years, to fill the vacancy occurring on January 1st, 1897, by the expiration of the term of one of the present incumbents, and three additional Associate Justices shall be elected for terms expiring respectively, January 1st, 1899, January 1st, 1901, and January 1st, 1903. The persons elected as additional Associate Justices shall among themselves determine by lot which of the three last mentioned terms each shall have, and they shall be commissioned accordingly.*

After said first election, all terms (except unexpired terms) shall be for six years each. In case of any vacancy which causes an unexpired term, the same shall be filled by executive appointment, and the person appointed by the Governor shall hold his office until the next regular election, and until his successor for the balance of the unexpired term shall have been elected and qualified. The returns of said special election shall be made to the Secretary of State.

(Approved December 16, 1895.)



MELGRIM AUDITORIUM,
GEORGIA STATE INDUSTRIAL COLLEGE FOR COLORED YOUTHS.

THE UNIVERSITY OF CHICAGO PRESS

Section III.

Paragraph I. There shall be a judge of the Superior Court for each Judicial Circuit, whose term of office shall be four years, and until his successor is qualified. He may act in other circuits when authorized by law.

Par. II. The successors to the present incumbents shall be elected by the General Assembly as follows: To the half (as near as may be) whose commissions are the oldest, in the year 1878; and to the others in the year 1880. All subsequent elections shall be at the session of the General Assembly next preceding the expiration of the terms of incumbents, except elections to fill vacancies. The day of election may be fixed by the General Assembly.

Par. III. The terms of the Judges to be elected under the constitution (except to fill vacancies) shall begin on the first day of January after their elections. But if the time for the meeting of the General Assembly shall be changed, the General Assembly may change the time when the terms of Judges thereafter elected shall begin.

Section IV.

Paragraph I. The Superior Courts shall have exclusive jurisdiction in cases of divorce; in criminal cases where the offender is subjected to loss of life, or confinement in the penitentiary; in cases respecting titles to land and equity cases.

Par. II. The General Assembly may confer upon the Courts of common law all the powers heretofore exercised by Courts of Equity in this State.

Par. III. Said Courts shall have jurisdiction in all civil cases, except as hereinafter provided.

Par. IV. They shall have appellate jurisdiction in all such cases as may be provided by law.

Par. V. They shall have power to correct errors in inferior judicatories by writ of *certiorari*, which shall only issue on the sanction of the Judge; and said Courts and the Judges thereof shall have power to issue writs of *mandamus*, prohibition, *scire facias*, and all other writs that may be necessary for carrying their powers fully into effect, and shall have such other powers as are or may be conferred on them by law.

Par. VI. The General Assembly may provide for an appeal from one jury, in the Superior Courts and City, to another, and the said Court may grant new trials on legal grounds.

Par. VII. The Court shall render judgment without the verdict of a jury in all civil cases founded on unconditional contracts in writing, where an issuable defense is not filed under oath or affirmation.

Par. VIII. The Superior Courts shall sit in each county not less than twice in each year, at such times as have been or may be appointed by law.

Par. IX. The General Assembly may provide by law for the appointment of some proper person to preside in cases where the presiding Judge is, from any cause, disqualified.

Section V.

Paragraph I. In any county within which there is, or hereafter may be, a City Court, the Judge of said Court, and of the Superior Court, may preside in the Courts of each other in cases where the Judge of either Court is disqualified to preside.

Section VI.

Paragraph I. The powers of a Court of Ordinary, and of Probate, shall be vested in an Ordinary for each county, from whose decision there may be an appeal (or, by consent of parties, without a decision) to the Superior Court, under regulations prescribed by law.

Par. II. The Courts of Ordinary shall have such powers in relation to roads, bridges, ferries, public buildings, paupers, county officers, county funds, county taxes, and other county matters as may be conferred on them by law.

Par. III. The Ordinary shall hold his office for the term of four years, and until his successor is elected and qualified.

Section VII.

Paragraph I. There shall be in each militia district one Justice of the Peace, whose official term, except when elected to fill an unexpired term, shall be four years.

Par. II. Justices of the Peace shall have jurisdiction in all civil cases, arising *ex contractu*, and in cases of injury or damage to personal property, when the principal sum does not exceed one hundred dollars, and shall sit monthly at fixed times and places; but in all cases there may be an appeal to a jury in said Court, or an appeal to the Superior Court, under such regulations as may be prescribed by law.

Par. III. Justices of the Peace shall be elected by the legal voters in their respective districts, and shall be commissioned by the Governor. They shall be removable on conviction for malpractice in office.

Section VIII.

Paragraph I. Commissioned Notaries Public, not to exceed one for each militia district, may be appointed by the Judge of the Superior Courts, in their respective circuits, upon recommendation of the grand juries of the several counties. They shall be commissioned by the Governor for the term of four years, and shall be *ex officio* Justices of the Peace, and shall be removable on conviction for malpractice in office.

Section IX.

Paragraph I. The jurisdiction, powers, proceedings and practice of all Courts or officers invested with judicial powers (except City Courts), of the same grade or class, so far as regulated by law, and the force and effect of the process, judgment and decree, by such Courts, severally, shall be uniform. This uniformity must be established by the General Assembly.

Section X.

Paragraph I. There shall be an Attorney-General of this State, who shall be elected by the people at the same time, for the same term and in the same manner as the Governor.

Par. II. It shall be the duty of the Solicitor-General to represent the legal adviser of the Executive Department, to represent the State in the Supreme Court in all capital felonies; and in all civil and criminal cases in any Court when required by the Governor, and to perform such other services as shall be required of him by law.

Section XI.

Paragraph I. There shall be a Solicitor-General for each judicial circuit, whose official term, except when commissioned to fill an unexpired term, shall be four years.

Par. II. It shall be the duty of the Solicitor-General to represent the State in all cases in the Superior Courts of his circuit, and in all cases taken up from his circuit to the Supreme Court, and to perform such other services as shall be required of him by law.

Section XII.

Paragraph I. The Judges of the Supreme and Superior Courts and Solicitors-General shall be elected by the General Assembly, in joint session, on such day or days as shall be fixed by joint resolution of both Houses. At the session of the General Assembly which is held next before the expiration of the terms of the present incumbents, as provided in this constitution, their successors shall be chosen; and the same shall apply to the election of those who shall succeed them. Vacancies occasioned by death, resignation or other cause shall be filled by appointment of the Governor, until the General Assembly shall convene, when an election shall be held to fill the unexpired portion of the vacant terms.

Section XIII.

Paragraph I. The Judges of the Supreme Court shall have, out of the Treasury of the State, salaries not to exceed three thousand dollars per annum; the Judges of the Superior Courts shall have salaries not to exceed two thousand dollars per annum; the Attorney-General shall have

a salary not to exceed two thousand dollars per annum; and the Solicitors-General shall each have salaries not to exceed two hundred and fifty dollars per annum; but the Attorney-General shall not have any fee or perquisite in any cases arising after the adoption of this constitution; but the provisions of this section shall not affect the salaries of those now in office.

Par. II. The General Assembly may, at any time, by a two-thirds vote of each branch, prescribe other and different salaries for any, or all, of the above officers, but no such change shall affect the officers then in commission.

Section XIV.

Paragraph I. No person shall be Judge of the Supreme or Superior Courts, or Attorney-General, unless, at the time of his election, he shall have attained the age of thirty years, and shall have been a citizen of the State three years, and have practiced law for seven years; and no person shall be hereafter elected Solicitor-General, unless, at the time of his election, he shall have attained twenty-five years of age, shall have been a citizen of the State for three years, and shall have practiced law for three years next preceding his election.

Section XV.

Paragraph I. No total divorce shall be granted, except on the concurrent verdicts of two juries at different terms of the Court.

Par. II. When a divorce is granted, the jury rendering the final verdict shall determine the rights and disabilities of the parties.

Section XVI.

Paragraph I. Divorce cases shall be brought in the county where the defendant resides, if a resident of this State; if the defendant be not a resident of this State, then in the county in which the plaintiff resides.

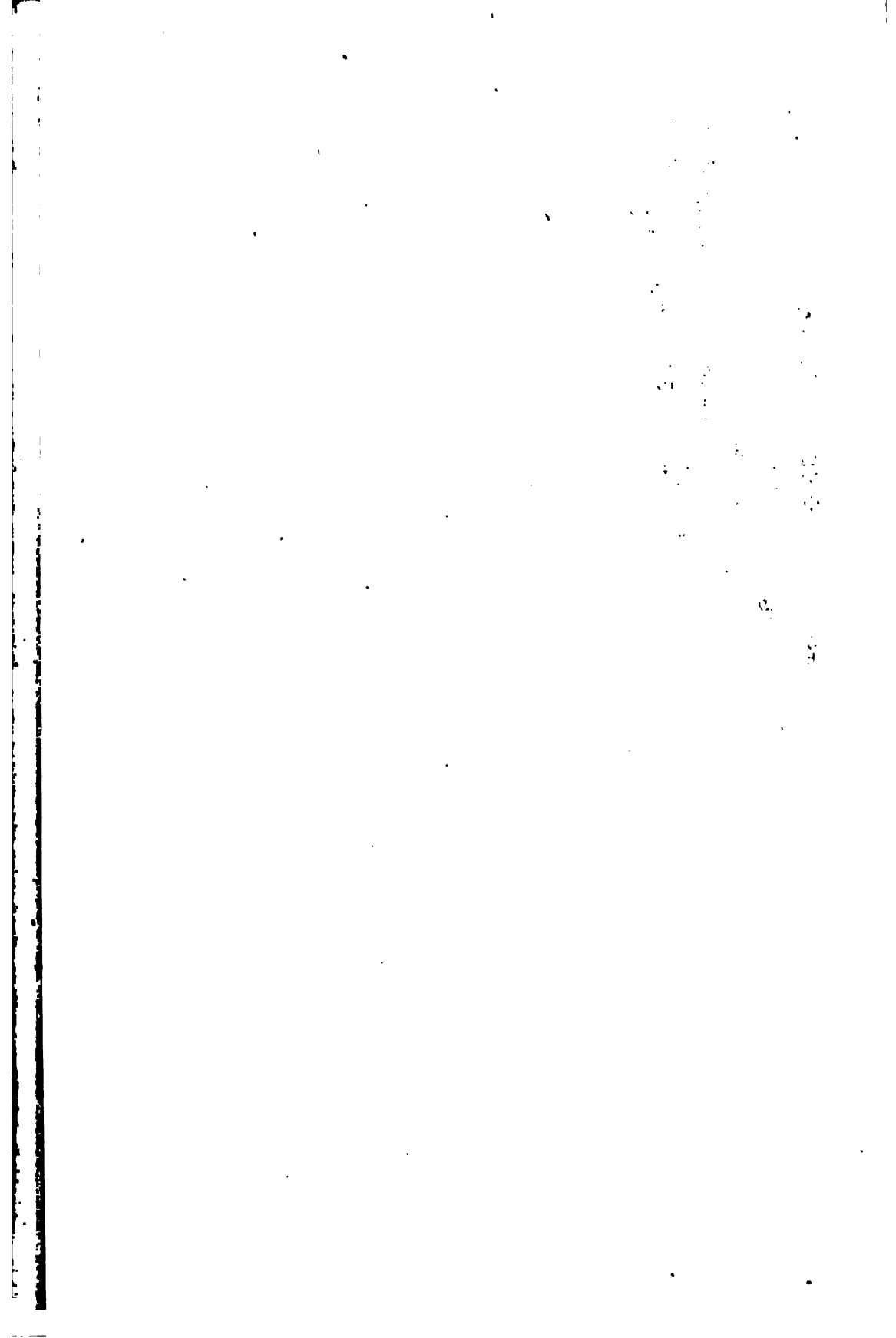
Par. II. Cases respecting titles to land shall be tried in the county where the land lies, except where a single tract is divided by a county line, in which case the Superior Court of either county shall have jurisdiction.

Par. III. Equity cases shall be tried in the county where a defendant resides against whom substantial relief is prayed.

Par. IV. Suits against joint obligors, joint promisors, copartners or joint trespassers, residing in different counties, may be tried in either county.

Par. V. Suits against the maker and indorser of promissory notes, or drawer, acceptor and indorser of foreign or inland bills of exchange, or like instruments, residing in different counties, shall be brought in the county where the maker or acceptor resides.

Par. VI. All other civil cases shall be tried in the county where the defendant resides, and all criminal cases shall be tried in the county



where the crime was committed, except cases in the Superior Courts where the Judge is satisfied that an impartial jury cannot be obtained in such county.

Section XVII.

Paragraph I. The power to change the venue in civil and criminal cases shall be vested in the Superior Courts, to be exercised in such manner as has been, or shall be, provided by law.

Section XVIII.

Paragraph I. The right of trial by jury, except where it is otherwise provided in this constitution, shall remain inviolate, but the General Assembly may prescribe any number not less than five, to constitute a trial or traverse jury in Courts other than the Superior and City Courts.

Par. II. The General Assembly shall provide by law for the selection of the most experienced, intelligent and upright men to serve as grand jurors, and intelligent and upright men to serve as traverse jurors. Nevertheless, the grand jurors shall be competent to serve as traverse jurors.

Par. III. It shall be the duty of the General Assembly, by general laws, to prescribe the manner of fixing compensation of jurors in all counties in this State.

Section XIX.

Paragraph I. The General Assembly shall have power to provide for the creation of County Commissioners in such counties as may require them, and to define their duties.

Section XX.

Paragraph I. All Courts not specially mentioned by name in the first section of this article may be abolished in any county, at the discretion of the General Assembly.

Section XXI.

Paragraph I. The costs in the Supreme Court shall not exceed ten dollars, unless otherwise provided by law. Plaintiffs in error shall not be required to pay costs in said Court when the usual pauper oath is filed in the Court below.

ARTICLE VII.

FINANCE, TAXATION AND PUBLIC DEBT.

Section I.

Paragraph I. The powers of taxation over the whole State shall be exercised by the General Assembly for the following purposes only:

For the support of the State Government and the public institutions.
For educational purposes, in instructing children in the elementary branches of an English education only.

To pay the interest on the public debt.

To pay the principal of the public debt.

To suppress insurrection, to repel invasion, and defend the State in time of war.

To supply the soldiers who lost a limb, or limbs, in the military service of the Confederate States with substantial artificial limbs during life; and to make suitable provisions for such Confederate soldiers as may have otherwise been disabled or permanently injured in such service, or who by reason of age and poverty, or infirmity and poverty, or blindness and poverty, are unable to provide a living for themselves; and for the widows of such Confederate soldiers as may have died in the service of the Confederate States, or since from wounds received therein, or disease contracted in the service; *provided*, that the act shall only apply to such widows as were married at the time of such service and have remained unmarried since the death of such soldier husband.

Section II.

Paragraph I. All taxation shall be uniform upon the same class of subjects, and *ad valorem* on all property subject to be taxed within the territorial limits of the authority levying the tax, and shall be levied and collected under general laws. The General Assembly may, however, impose a tax on such domestic animals as, from their nature and habits, are destructive of other property.

Par. II. The General Assembly may, by law, exempt from taxation all public property, places of religious worship or burial; all institutions of purely public charity; all buildings erected for and used as a college, incorporated academy, or other seminary of learning; the real and personal estate of any public library, and that of any other literary association, used by or connected with such library; all books and philosophical apparatus; and all paintings and statuary of any company or association, kept in a public hall and not held as merchandise, or for purpose of sale or gain; *provided*, the property so exempted be not used for purposes of private or corporate profit or income.

Par. III. No poll tax shall be levied except for educational purposes, and such tax shall not exceed one dollar annually upon each poll.

Par. IV. All laws exempting property from taxation, other than the property herein enumerated, shall be void.

Par. V. The power to tax corporations and corporate property shall not be surrendered or suspended by any contract or grant to which the State shall be a party.

Section III.

Paragraph I. No debt shall be contracted by or on behalf of the State, except to supply casual deficiencies of revenue, to repel invasion, sup-

press insurrection, and defend the State in time of war, or to pay the existing public debt; but the debt created to supply deficiencies in revenue shall not exceed, in the aggregate, two hundred thousand dollars.

Section IV.

Paragraph I. All laws authorizing the borrowing of money by or on behalf of the State shall specify the purposes for which the money is to be used, and the money so obtained shall be used for the purposes specified, and for no other.

Section V.

Paragraph I. The credit of the State shall not be pledged or loaned to any individual, company, corporation or association, and the State shall not become a joint owner or stockholder in any company, association or corporation.

Section VI.

Paragraph I. The General Assembly shall not authorize any county, municipal corporation or political division of this State to become a stockholder in any company, corporation or association or to appropriate money for, or to loan its credit to any corporation, company, association, institution or individual, except for purely charitable purposes. This restriction shall not operate to prevent the support of schools by municipal corporations within their respective limits; *provided*, that if any municipal corporation shall offer to the State any property for locating or building a capitol, and the State accepts such offer, the corporation may comply with such offer.

Par. II. The General Assembly shall not have power to delegate to any county the right to levy a tax for any purpose, except for educational purposes in instructing children in the elementary branches of an English education only; to build and repair the public buildings and bridges; to maintain and support prisoners; to pay jurors and coroners, and for litigation, quarantine, roads and expenses of Courts; to support paupers and pay debts heretofore existing.

Section VII.

Paragraph I. The debt hereafter incurred by any county, municipal corporation or political division of this State, except as in this constitution provided for, shall never exceed seven per centum of the assessed value of all the taxable property therein; and no such county, municipality or division shall incur any new debt, except for a temporary loan or loans to supply casual deficiencies of revenue, not to exceed one-fifth of one per centum of the assessed value of taxable property therein, without the assent of two-thirds of the qualified voters thereof, at an election for that purpose, to be held as may be prescribed by law; but

any city, the debt of which does not exceed seven per centum of the assessed value of the taxable property at the time of the adoption of this constitution, may be authorized by law to increase, at any time, the amount of said debt, three per centum upon such assessed valuation.

Par. II. Any county, municipal corporation or political division of this State, which shall incur any bonded indebtedness under the provisions of this constitution, shall, at or before the time of so doing, provide for the assessment and collection of an annual tax sufficient in amount to pay the principal and interest of said debt within thirty years from the date of the incurring of said indebtedness.

Section VIII.

Paragraph I. The State shall not assume the debt, nor any part thereof, of any county, municipal corporation, or political division of the State, unless such debt shall be contracted to enable the State to repel invasion, suppress insurrection, or defend itself in time of war.

Section IX.

Paragraph I. The receiving, directly or indirectly, by any officer of the State or county, or member or officer of the General Assembly, of any interests, profits or perquisites arising from the use or loan of public funds in his hands, or moneys to be raised through his agency for State or county purposes, shall be deemed a felony, and punishable as may be prescribed by law, a part of which punishment shall be a disqualification from holding office.

Section X.

Paragraph I. Municipal corporations shall not incur any debt until provision therefor shall have been made by the municipal government.

Section XI.

Paragraph I. The General Assembly shall have no authority to appropriate money, either directly or indirectly, to pay the whole or any part of the principal or interest of the bonds, or other obligations, which have been pronounced illegal, null and void by the General Assembly, and the constitutional amendments ratified by a vote of the people on the first day of May, 1877; nor shall the General Assembly have authority to pay any of the obligations created by the State under laws passed during the late war between the States, nor any of the bonds, notes or obligations made and entered into during the existence of said war, the time for the payment of which was fixed after the ratification of a treaty of peace between the United States and the Confederate States; nor shall the General Assembly pass any law, or the Governor, or other State official enter into any contract or agreement, whereby the State shall be made a party to any suit in any Court of this State, or of the United States, instituted to test the validity of any such bonds or obligations.

Section XII.

Paragraph I. The bonded debt of the State shall never be increased, except to repel invasion, suppress insurrection, or defend the State in time of war.

Section XIII.

Paragraph I. The proceeds of the sale of the Western and Atlantic, Macon and Brunswick, or other railroads, held by the State, and any other property owned by the State, whenever the General Assembly may authorize the sale of the whole or any part thereof, shall be applied to the payment of the bonded debt of the State, and shall not be used for any other purpose whatever, so long as the State has any existing bonded debt; *provided*, that the proceeds of the sale of the Western and Atlantic Railroad shall be applied to the payment of the bonds for which said railroad has been mortgaged, in preference to all other bonds.

Section XIV.

Paragraph I. The General Assembly shall raise, by taxation, each year, in addition to the sum required to pay the public expenses and interest on the public debt, the sum of one hundred thousand dollars, which shall be held as a sinking fund, to pay off and retire the bonds of the State which have not yet matured, and shall be applied to no other purpose whatever. If the bonds cannot at any time be purchased at or below par, then the sinking fund, herein provided for, may be loaned by the Governor and Treasurer of the State; *provided*, the security which shall be demanded for said loan shall consist only of the valid bonds of the State; but this section shall not take effect until the eight per cent. currency bonds, issued under the act of February the 19th, 1873, shall have been paid.

Section XV.

Paragraph I. The Comptroller-General and Treasurer shall each make to the Governor a quarterly report of the financial condition of the State, which report shall include a statement of the assets, liabilities and income of the State, and expenditures therefor, for three months preceding; and it shall be the duty of the Governor to carefully examine the same by himself, or through competent persons connected with his department, and cause an abstract thereof to be published for the information of the people, which abstract shall be indorsed by him as having been examined.

Section XVI.

Paragraph I. The General Assembly shall not, by vote, resolution or order, grant any donation, or gratuity, in favor of any person, corporation or association.

Par. II. The General Assembly shall not grant or authorize extra compensation to any public officer, agent or contractor, after the service has been rendered, or the contract entered into.

Section XVII.

Paragraph I. The office of the State Printer shall cease with the expiration of the term of the present incumbent, and the General Assembly shall provide, by law, for letting the public printing to the lowest responsible bidder, or bidders, who shall give adequate and satisfactory security for the faithful performance thereof. No member of the General Assembly, or other public officer, shall be interested, either directly or indirectly, in any such contract.

ARTICLE VIII.

EDUCATION.

Section I.

Paragraph I. There shall be a thorough system of common schools for the education of children in the elementary branches of an English education only, as nearly uniform as practicable, the expenses of which shall be provided for by taxation or otherwise. The schools shall be free to all children of the State, but separate schools shall be provided for the white and colored races.

Section II.

Paragraph I. There shall be a State School Commissioner elected by the people at the same time and manner as the Governor and State house officers are elected, whose term of office shall be two years, and until his successor is elected and qualified. His office shall be at the seat of the government, and he shall be paid a salary not to exceed two thousand dollars (\$2,000) per annum. The General Assembly may substitute for the State School Commissioner such officer or officers as may be deemed necessary to perfect the system of public education.

(Act approved December 18, 1894.)

Section III.

Paragraph I. The poll tax, any educational fund now belonging to the State (except the endowment of, and debt due to, the University of Georgia), a special tax on shows and exhibitions, and of the sale of spirituous and malt liquors, which the General Assembly is hereby authorized to assess, and the proceeds of any commutation tax for military service, and all taxes that may be assessed on such domestic animals as, from their nature and habits, are destructive to other property, are hereby set apart and devoted for the support of common schools.

Section IV.

Paragraph I. Authority may be granted to counties, upon the recommendation of two grand juries, and to municipal corporations upon the recommendation of the corporate authority, to establish and maintain public schools in their respective limits, by local taxation; but no such local laws shall take effect until the same shall have been submitted to a vote of the qualified voters in each county or municipal corporation, and approved by a two-thirds vote of persons qualified to vote at such election; and the General Assembly may prescribe who shall vote on such question.

Section V.

Paragraph I. Existing local school systems shall not be affected by this constitution. Nothing contained in section first of this article shall be construed to deprive schools in this State, not common schools, from participation in the educational fund of the State, as to all pupils therein taught in the elementary branches of an English education.

Section VI.

Paragraph I. The Trustees of the University of Georgia may accept bequests, donations and grants of land, or other property, for the use of said University. In addition to the payment of the annual interest on the debt due by the State to the University, the General Assembly may, from time to time, make such donations thereto as the condition of the treasury will authorize. And the General Assembly may also, from time to time, make such appropriations of money as the condition of the treasury will authorize to any college or university (not exceeding one in number) now established, or hereafter to be established, in this State for the education of persons of color.

ARTICLE IX.

HOMESTEAD AND EXEMPTION.

Section I.

Paragraph I. There shall be exempt from levy and sale, by virtue of any process whatever under the laws of this State, except as hereinafter excepted, of the property of every head of a family, or guardian, or trustee of a family of minor children, or every aged or infirm person, or persons having the care and support of dependent females of any age, who is not the head of a family, realty or personalty, or both, to the value in the aggregate of sixteen hundred dollars.

NOTE—The above provision of the constitution was specially submitted to the people and ratified, as a part thereof, by them, on December 5th, 1887.

Section II.

Paragraph I. No Court or ministerial officer in this State shall ever have jurisdiction or authority to enforce any judgment, execution or decree against the property set apart for such purpose, including such improvements as may be made thereon from time to time, except for taxes, for the purchase money of the same, for labor done thereon, for material furnished therefor, or for the removal of incumbrances thereon.

Section III.

Paragraph I. The debtor shall have power to waive or renounce in writing his right to the benefit of the exemption provided for in this article, except as to wearing apparel, and not exceeding three hundred dollars worth of household and kitchen furniture, and provisions to be selected by himself and wife if any, and he shall not after it is set apart, alienate or encumber the property so exempted, but it may be sold by the debtor and his wife, if any, jointly, with the sanction of the Judge of the Superior Court of the county where the debtor resides or the land is situated, the proceeds to be reinvested upon the same uses.

Section IV.

Paragraph I. The General Assembly shall provide, by law, as early as practicable, for the setting apart and valuation of said property. But nothing in this article shall be construed to affect or repeal the existing laws for exemption of property from sale contained in the present Code of this State, in paragraphs 2040 to 2049 inclusive, and the act amendatory thereto. It may be optional with the applicant to take either, but not both, of such exemptions.

Section V.

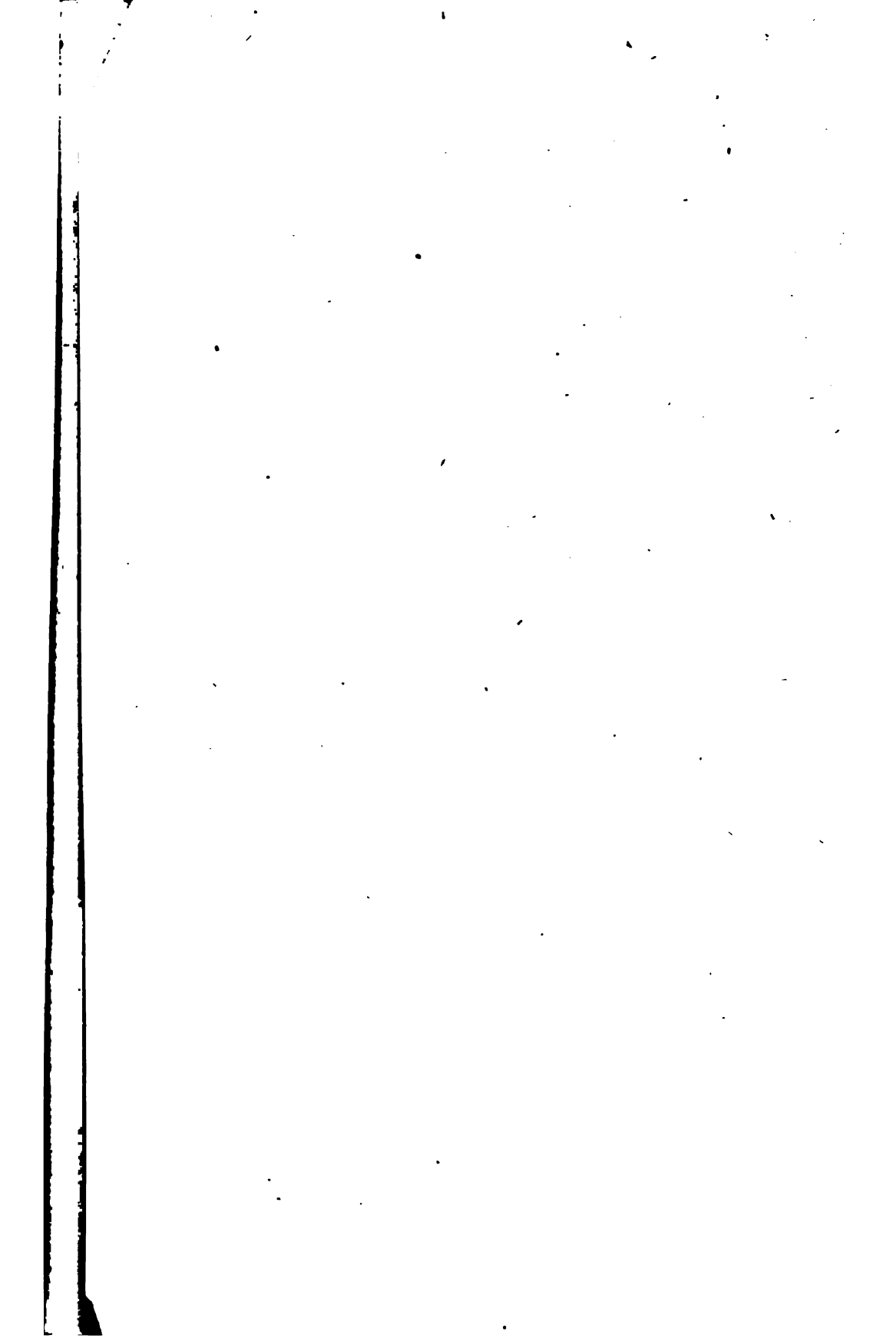
Paragraph I. The debtor shall have authority to waive or renounce in writing his right to the benefit of the exemption provided for in section four, except as is excepted in section three of this article.

Section VI.

Paragraph I. The applicant shall, at any time, have the right to supplement his exemption by adding to an amount already set apart, which is less than the whole amount of exemption herein allowed, a sufficiency to make his exemption equal to the whole amount.

Section VII.

Paragraph I. Homestead and exemptions of personal property which have been heretofore set apart by virtue of the provisions of the existing



constitution of this State, and in accordance with the laws for the enforcement thereof, or which may be hereafter so set apart, at any time, shall be and remain valid as against all debts and liabilities existing at the time of the adoption of this constitution, to the same extent that they would have been had said existing constitution not been revised.

Section VIII.

Paragraph I. Rights which have become vested under previously existing laws shall not be affected by anything herein contained. In all cases in which homesteads have been set apart under the constitution of 1868, and the laws made in pursuance thereof, and a *bona fide* sale of such property has been subsequently made, and the full purchase price thereof paid, all right of exemption in such property by reason of its having been so set apart, shall cease in so far as it affects the right of the purchaser. In all such cases, where a part only of the purchase price has been paid, such transactions shall be governed by the laws now of force in this State, in so far as they affect the rights of the purchaser, as though said property had not been set apart.

Section IX.

Paragraph I. Parties who have taken a homestead of realty under the constitution of eighteen hundred and sixty-eight shall have the right to sell said homestead and reinvest the same by order of the Judge of the Superior Courts of this State.

ARTICLE X.

MILITIA.

Section I.

Paragraph I. A well regulated militia being essential to the peace and security of the State, the General Assembly shall have authority to provide by law how the militia of this State shall be organized, officered, trained, armed and equipped, and of whom it shall consist.

Par. II. The General Assembly shall have power to authorize the formation of volunteer companies, and to provide for their organization into battalions, regiments, brigades, divisions and corps, with such restrictions as may be prescribed by law, and shall have authority to arm and equip the same.

Par. III. The officers and men of the militia and volunteer forces shall not be entitled to receive any pay, rations or emoluments, when not in active service by authority of the State.

ARTICLE XL

COUNTIES AND COUNTY OFFICERS.

Section I.

Paragraph I. Each county shall be a body corporate, with such powers and limitations as may be prescribed by law. All suits by or against a county shall be in the name thereof; and the metes and bounds of the several counties shall remain as now prescribed by law, unless changed as hereinafter provided.

Par. II. No new county shall be created.

Par. III. County lines shall not be changed, unless under the operation of a general law for that purpose.

Par. IV. No county site shall be changed or removed, except by a two-thirds vote of the qualified voters of the county, voting at an election held for that purpose, and a two-thirds vote of the General Assembly.

Par. V. Any county may be dissolved and merged with contiguous counties by a two-thirds vote of the qualified electors of such county voting at an election held for that purpose.

Section II.

Paragraph I. The county officers shall be elected by the qualified voters of their respective counties or districts, and shall hold their offices for two years. They shall be removed on conviction for malpractice in office, and no person shall be eligible to any of the offices referred to in this paragraph unless he shall have been a resident of the county for two years and is a qualified voter.

Section III.

Paragraph I. Whatever tribunal, or officers may hereafter be created by the General Assembly for the transaction of county matters, shall be uniform throughout the State, and of the same name, jurisdiction and remedies, except that the General Assembly may provide for the appointment of commissioners of roads and revenue in any county.

ARTICLE XII.

THE LAWS OF GENERAL OPERATION IN FORCE IN THIS STATE.

Section I.

Paragraph I. The laws of general operation in this State are, first, as the supreme law: The constitution of the United States, the laws of the United States in pursuance thereof, and all treaties made under the authority of the United States.

Par. II. Second. As next in authority thereto: this constitution.

Par. III. Third. In subordination to the foregoing: All laws now of force in this State, not inconsistent with this constitution, and the ordinances of this convention, shall remain of force until the same are modified or repealed by the General Assembly. The tax acts and appropriation acts passed by the General Assembly of 1877, and approved by the Governor of the State, and not inconsistent with the constitution, are hereby continued in force until altered by law.

Par. IV. Local and private acts passed for the benefit of counties, cities, towns, corporations and private persons, not inconsistent with the supreme law, nor with this constitution, and which have not expired nor been repealed, shall have the force of statute law, subject to judicial decision as to their validity when passed, and to any limitations imposed by their own terms.

Par. V. All rights, privileges and immunities which may have vested in, or accrued to, any person or persons, or corporations, in his, her or their own right, or in any fiduciary capacity, under and in virtue of any act of the General Assembly, or any judgment, decree or order, or other proceeding of any court of competent jurisdiction in this State heretofore rendered, shall be held inviolate by all courts before which they may be brought in question, unless attacked for fraud.

Par. VI. All judgments, decrees, orders and other proceedings of the several courts of this State, heretofore made, within the limits of their several jurisdictions, are hereby ratified and affirmed, subject only to revision by motion for a new trial, appeal, bill of review, or other proceeding, in conformity with the law of force when they were made.

Par. VII. The officers of the government now existing shall continue in the exercise of their several functions until their successors are duly elected or appointed and qualified, but nothing herein is to apply to any officer whose office may be abolished by this constitution.

Par. VIII. The ordinances of this convention shall have the force of laws until otherwise provided by the General Assembly, except the ordinances in reference to submitting the homestead and capital questions to a vote of the people, which ordinances, after being voted on, shall have the effect of constitutional provisions.

NOTE—Under the ordinance of the convention submitting the question of the location of the capital to the people, the city of Atlanta was chosen, December 5th, 1877.

ARTICLE XIII.

AMENDMENTS TO THE CONSTITUTION.

Section I.

Paragraph I. Any amendment, or amendments, to this constitution may be proposed in the Senate or House of Representatives, and if the same shall be agreed to by two-thirds of the members elected to each of the two Houses, such proposed amendment, or amendments, shall be

entered on their journals, with the yeas and nays taken thereon. And the General Assembly shall cause such amendment, or amendments, to be published in one or more papers in each Congressional district for two months previous to the time of holding the next general election, and shall also provide for a submission of such proposed amendment, or amendments, to the people at said next general election, and if the people shall ratify such amendment, or amendments, by a majority of the electors qualified to vote for members of the General Assembly, voting thereon, such amendment, or amendments, shall become a part of this constitution. When more than one amendment is submitted at the same time, they shall be so submitted as to enable the electors to vote on each amendment separately.

Par. II. No convention of the people shall be called by the General Assembly to revise, amend or change this constitution, unless by the concurrence of two-thirds of all the members of each House of the General Assembly. The representation in said convention shall be based on population as near as practicable.

Section II.

Paragraph I. The constitution shall be submitted for ratification or rejection to the voters of the State, at an election to be held on the first Wednesday in December, one thousand eight hundred and seventy-seven in the several election districts of this State, at which election every person shall be entitled to vote who is entitled to vote for the members of the General Assembly under the constitution and laws of force at the date of such election; said election to be held and conducted as is now provided by law for holding elections for members of the General Assembly. All persons voting at said election in favor of adopting the constitution shall write or have printed on their ballots the words, "*For Ratification*," and all persons opposed to the adoption of this constitution shall write or have printed on their ballots the words, "*Against Ratification*."

Par. II. The votes cast at said election shall be consolidated in each of the counties of the State as is now required by law in elections for members of the General Assembly, and returns thereof made to the Governor; and should a majority of all the votes cast at said election be in favor of ratification, he shall declare the said constitution adopted, and make proclamation of the result of said election by publication in one or more newspapers in each Congressional district of the State; but should a majority of the votes cast be against ratification, he shall in the same manner proclaim the said constitution rejected.

ORDINANCES.

AN ORDINANCE.

Be it ordained by the people of Georgia in Convention assembled:

1st. That the question of the location of the capital of this State be kept out of the constitution to be adopted by this convention.

2d. That at the first general election hereafter held for members of the General Assembly, every voter may indorse on his ballot "Atlanta" or "Milledgeville," and the one of these places receiving the largest number of votes shall be the capital of the State until changed by the same authority and in the same way that may be provided for the alteration of the constitution that may be adopted by the convention, whether said constitution be ratified or rejected. And that every person entitled to vote for members of the General Assembly, under the present constitution and laws of this State, shall be entitled to vote under this ordinance; and, in the event of the rejection of said constitution, shall (should) a majority of votes cast be in favor of Milledgeville, then this provision to operate and take effect as an amendment to the present constitution.

AN ORDINANCE.

Be it ordained by the people of Georgia in Convention assembled, and it is hereby ordained by authority of the same:

1st. That the article adopted by this convention on the subject of Homestead and Exemption shall not form a part of this Constitution. except as hereinafter provided.

2d. At the election held for the ratification or rejection of this constitution it shall be lawful for each voter to have written or printed on his ballot the words, "Homestead of 1877," or the words, "Homestead of 1868."

3d. In the event that a majority of the ballots so cast have indorsed upon them the words, "Homestead of 1877," then said article so adopted by this convention shall form a part of the constitution submitted, if the same is ratified; but in the event that said constitution, so submitted, shall not be ratified, then the article on Homestead and Exemptions, so adopted as aforesaid by this convention, shall supersede article seven of the constitution of 1868 on the subject of Homestead and Exemptions, and form a part of this constitution.

4th. If a majority of the ballots so cast as aforesaid shall have indorsed upon them the words, "Homestead of 1868," then article seventh of the constitution of 1868 shall supersede the article on Homestead and Exemptions adopted by this convention, and shall be incorporated in and form (a part) of the constitution so submitted and ratified.

Read and adopted in convention August 22, 1877.

Attest:

C. J. JENKINS,

President Constitutional Convention.

JAMES COOPER NISBET, Secretary.

AN ORDINANCE.

Whereas, A committee has been appointed by this convention to consider and inquire into the ways and means by which the expenses of this convention, over and above those provided for by the General As-

sembly, can be defrayed; and, whereas, the committee are satisfied that a sufficient sum of money for the same can be procured by an ordinance of this convention; therefore,

Be it ordained by the people of Georgia in Convention assembled, and it is hereby ordained by authority of the same:

That the President of this Convention shall be, and he is hereby, empowered, by authority of this convention, to negotiate a loan of a sufficient sum of money, at seven per cent. per annum, to defray the residue of the expenses of this convention not provided for by the act of the General Assembly calling this convention.

Read and adopted in convention August 18, 1877.

Attest:

C. J. JENKINS,

President Constitutional Convention.

JAMES COOPER NISBET, Secretary.

AN ORDINANCE.

Be it ordained by the people of Georgia in Convention assembled:

1st. That the constitution as adopted and revised be enrolled and signed by the officers and members of this convention.

2d. That the Governor shall issue his proclamation, ordering an election for members of the General Assembly, and a vote upon the ratification or rejection of this constitution, as therein provided, and a vote upon the Capital and Homestead questions, as provided by the ordinances of this convention.

Read and adopted in convention, August 25th, 1877.

Attest:

C. J. JENKINS,

President Constitutional Convention.

JAMES COOPER NESBIT, Secretary.

AN ORDINANCE.

There shall be sixteen Judicial Circuits in this State, and it shall be the duty of the General Assembly to organize and apportion the same in such manner as to equalize the business and labor of the Judges in said several circuits as far as may be practicable. But the General Assembly shall have power hereafter to reorganize, increase or diminish the number of circuits; *provided, however*, that the circuits shall remain as now organized until changed by law.

Read and adopted in convention August 23, 1877.

Attest:

C. J. JENKINS,

President Constitutional Convention.

JAMES COOPER NESBIT, Secretary

AMENDMENTS TO CONSTITUTION.

Paragraph 15, of Section 7, Article 3, stricken out.

Paragraph 1, Section 1, Article 7, amended by adding at the end of said paragraph the following words: "And to make suitable provisions for such Confederate soldiers as may have been permanently injured in such service."

See Acts of 1884-1885.

Paragraph 1, Section 1, Article 7, also amended by adding at the end of said paragraph the following words: "And to make suitable provision for such Confederate soldiers as may have otherwise been disabled or permanently injured in such service; and for the widows of such Confederate soldiers as may have died in the service of the Confederate States, or since from wounds received therein, or diseases contracted therein."

Paragraph 3, Section 4, Article 2, amended by striking out "biennially" after the word "and" and before the word "thereafter," and substituting therefor the word "annually."

Paragraph 6, Section 4, Article 2, amended by striking out the words "forty days, unless by a two-thirds vote of the whole number of each House," and substituting therefor "fifty days." (These amendments were construed to apply to Article 3, instead of Article 2.)

Paragraph 7, Section 7, Article 3, amended by adding thereto, "but the first and second reading of each local bill and bank and railroad charters in each House shall consist of the reading of the title only, unless said bill is ordered to be engrossed."

Paragraph 18, Section 7, Article 3, amended by striking out, after the word "companies," in the second line, the following words, viz.: "Except banking, insurance, railroad, canal, navigation, express and telegraph companies," and substituting therefor, at the end of said paragraph, after the word "courts," the following, viz.: "All corporate powers and privileges to banking, insurance, railroad, canal, navigation, express and telegraph companies shall be issued and granted by the Secretary of State in such manner as shall be prescribed by law."

See Acts of 1890-91, Vol. 1, pages 55 to 60, inclusive.

Paragraph 1, Section 1, of Article 7, by adding after the word service in the thirteenth line of said paragraph, the following words, to wit: "Or who, by reason of age and poverty, or infirmity and poverty, or blindness and poverty, are unable to provide a living for themselves."

Act approved, December 19, 1893. Adopted by vote of the people October, 1894.

We call attention to the two following important acts relating to adulterated food or drinks:

TO PREVENT THE SALE OF ADULTERATED FOOD OR
DRINKS, EXCEPT ON CERTAIN CONDITIONS, ETC.

No. 329.

An Act to prohibit the sale or offering for sale in this State, any adulterated article of food or drink, except on certain conditions, and to prescribe a penalty for so doing, and for other purposes.

Section 1. Be it enacted by the General Assembly of Georgia, That from and after the passage of this Act, it shall not be lawful for any person, in his own right, or as an agent for another, to willfully and knowingly sell, or offer for sale, in this State, any adulterated article of food or drink, unless the package or vessel containing the same has attached thereto a true and correct analysis of the article or thing therein contained, and notice thereof given to each and every purchaser, when such article or thing may be offered for sale, that the article or thing is adulterated.

Sec. II. And be it further enacted, That any person or persons violating the first section of this Act shall be guilty of a misdemeanor, and, on conviction, shall be punished as is prescribed in section 4310 of the Code of 1882 of this State.

Sec. III. Be it further enacted, That it shall be the duty of each and every grand jury in the several counties of this State to diligently inquire into any violation of the first section of this Act, and true presentments make of all violations of the same, and it shall be the duty of the judges of the superior courts in the State to bring this Act to the attention of grand jurors at each term of the court in the several counties of this State for two (2) years next after the passage of this Act.

Sec. IV. Be it further enacted by the authority aforesaid, That all laws and parts of laws in conflict with this Act be, and the same are, hereby repealed.

Approved September 26, 1883.

ARTICLE 16.

SALE OF ADULTERATED MILK, REGULATIONS AS TO
IMITATION BUTTER AND CHEESE, UNWHOLESOME
PROVISIONS, ETC.

Par. 456. *Selling, offering for sale, or delivering, certain kinds of milk, prohibited.* No person, corporation or agent shall sell, or expose for sale, or deliver for domestic use, any unclean, impure, unwholesome, adulterated, or skimmed milk, or milk from which has been

held back, what is known as "strippings," or milk taken from an animal having disease, ulcers, or abscesses, or from an animal within less than fifteen days before, or less than five days after, parturition; *provided*, that this section shall not apply to the sale of buttermilk, or to skimmed milk, when sold as such. Milk which is proven by any reliable test or analysis to contain less than three and one half per centum of butter fat, shall be regarded as skimmed or partially skimmed milk.

Par. 457. *Imitation butter and cheese defined.* Every article, substance, or compound, other than that produced from pure whole milk, or cream from the same, made in the semblance of butter or of cheese, and designed to be used as a substitute for butter or cheese made from pure milk or cream from the same, is imitation butter or imitation cheese, as the case may be; *provided*, the use of salt, rennet and harmless coloring-matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation.

Par. 458. *Making, selling, etc., imitation butter or cheese, prohibited.* No person shall, by himself or employee or agent, produce or manufacture or sell, or keep for sale, or offer for sale, any imitation butter or imitation cheese made or compounded in violation of this Article, whether such imitation shall have been made or produced in this State or elsewhere; but nothing in this Article shall be construed to prohibit the manufacture and sale of imitation butter or imitation cheese under the regulations hereinafter provided, not manufactured or colored as herein prohibited.

Par. 459. *Sale under pretense of genuineness.* No person, by himself or agent or employee, shall sell, or offer for sale, any imitation butter or imitation cheese, under the pretense that it is genuine butter or genuine cheese. And no person, his agent or employee, shall sell any such imitation, unless he shall notify the purchaser distinctly at the time of the sale that it is such imitation, and at the same time shall deliver to the purchaser a statement printed in black letters not smaller than 4-line pica, in the English language, that the article is imitation butter or imitation cheese, and give the name and address of its producer, and contain no other words.

Par. 460. *Use of imitations regulated.* No keeper or proprietor of a bakery, hotel, boarding-house, saloon, restaurant, lunch-counter, or other place of public entertainment, or any employee or other person having charge thereof, or any person furnishing board for others than his own family, shall keep, use, or serve therein or elsewhere, either as food for his guests, boarders, patrons, customers or employees, or for cooking purposes, any imitation butter or imitation cheese, unless such keeper, proprietor, or other person in charge of such place of entertainment shall keep constantly posted in a most conspicuous place in the room or rooms, or other place where such imitations shall be served or sold, so that the same may be easily seen and read by any person in such room or place, a white card not less than ten by fourteen inches in size, on which shall be printed, in the English language, in plain, black

Roman letters, not smaller than one inch in height and one-half inch in width, the words, "Imitation butter used here," or "Imitation cheese used here," as the case may be, and said cards shall not contain any other words or expressions.

Par. 461. *Use of coloring-matter to produce resemblance, prohibited.* No person shall coat, powder, or color with anatto or any coloring-matter whatever, any substance designed to be used as a substitute for butter or for cheese, whereby such substance or product shall be caused to resemble butter or cheese, the product of pure milk or cream.

Par. 462. *Combining substances to produce resemblances, prohibited.* No person shall combine any animal fat or vegetable oil, or other substance, with butter or cheese, or combine therewith or with animal fat, or with vegetable oil, or with a combination of the two, or with either one, or with any substance whatever, any anatto or any coloring-matter for the purpose or with the effect of imparting thereto a yellow color, or any shade of yellow, so that such substance shall resemble genuine yellow butter or cheese, nor introduce any such coloring-matter or any such substance into any of the ingredients of which such substitute may be composed; *provided*, that nothing in this Article shall be construed to prohibit the use of salt, rennet, or harmless coloring-matter for coloring the products of pure milk or cream from the same.

Par. 463. *Marking substitutes.* Every person who lawfully manufactures any substance designed to be used as a substitute for butter or for cheese, shall mark by branding, stamping, or stenciling upon the top and side of each tub, box, or other vessel in which such substitute shall be kept, or in which it shall be removed from the place where produced, in a clear and durable manner, in the English language, the words "Substitute for butter," or "Substitute for cheese," as the case may be, in printed letters, in plain Roman type, each of which shall be not less than one inch in height and one-half inch in breadth.

Par. 464. *Possession of substitute regulated.* No person shall have in his possession or control, except for the actual consumption of himself or family, any substance designed to be used as a substitute for butter or cheese, unless the vessel containing it shall be marked as required in the preceding section.

Par. 465. *Punishment.* A violation of any of the foregoing provisions of this Article shall be a misdemeanor.

Acts of 1895, page 60.

STATE HOUSE OFFICERS.

ALLEN D. CANDLER, Governor.	W. M. SCOTT, Entomologist.
JOS. M. TERRELL, Attorney-General.	GLASCOCK BARRETT, State Oil Inspector.
WM. A. WRIGHT, Comptroller-General.	W. S. YEATES, Geologist.
ROBT. E. PARK, Treasurer,	JAS. E. BROWN, State Librarian.
PHILIP COOK, Secretary of State.	JNO. W. LINDSAY, Pension Commissioner.
J. W. ROBERTSON, Adjutant-General.	Prison Commission.
G. R. GLENN, State School Commissioner.	JOS. S. TURNER, Chairman.
O. B. STEVENS, Commissioner of Agriculture.	CLEMENT A. EVANS, THOMAS EASON.
R. F. WRIGHT, Assistant Commissioner of Agriculture.	Railroad Commission.
JNO. M. McCANDLESS, State Chemist.	THOS. C. CRENSHAW, JR., Chmn. SPENCER R. ATKINSON, J. POPE BROWN.

SUPREME COURT.

T. J. SIMMONS, Chief Justice.	WM. H. FISH, Associate Justice.
SAMUEL LUMPKIN, Presiding Justice.	H. T. LEWIS, Associate Justice.
WM. A. LITTLE, Associate Justice.	A. J. COBB, Associate Justice.

SUPERIOR COURTS.

CIRCUITS.	JUDGES.	SOLICITORS.
Albany Circuit	W. N. SPENCE.....	W. E. Wooten.
Atlanta Circuit	J. H. LUMPKIN.....	O. D. Hill.
Atlantic Circuit	PAUL E. SEABROOK.....	Livingston Kenan.
Augusta Circuit	E. L. BRINSON.....	J. S. Reynolds.
Blue Ridge Circuit	GEO. F. GOBER.....	Thomas Hutcheson.
Brunswick Circuit	JOS. W. BENNETT.....	Jno. W. Bennett.
Chattahoochee Circuit ...	W. B. BUTT.....	S. P. Gilbert.
Cherokee Circuit	A. W. FITE.....	Sam. P. Maddox.
Coweta Circuit	S. W. HARRIS.....	T. A. Atkinson.
Eastern Circuit	ROBERT FALLIGANT.....	W. W. Osborne.
Flint Circuit	E. J. REAGAN.....	O. H. B. Bloodworth.
Macon Circuit	W. H. FELTON, Jr.....	William Brunson.
Middle Circuit	B. D. EVANS.....	B. T. Rawlings.
Northeastern Circuit	J. B. ESTES.....	W. A. Charters.
Northern Circuit	H. M. HOLDEN.....	David W. Meadow.
Ocmulgee Circuit	JNO. C. HART.....	H. G. Lewis.
Oconee Circuit	D. M. ROBERTS.....	J. F. DeLacy.
Pataula Circuit	H. C. SHEFFIELD.....	J. A. Laing.
Rome Circuit	W. M. HENRY.....	Moses Wright.
Southern Circuit	A. H. HANSELL.....	W. E. Thomas.
Southwestern Circuit	Z. A. LITTLEJOHN.....	F. A. Hooper.
Stone Mountain Circuit...	JNO. S. CANDLER.....	W. T. Kimsey.
Tallapoosa Circuit	CHAS. G. JAMES.....	W. T. Roberts.
Western Circuit	R. B. RUSSELL.....	C. H. Brand.

THE GEORGIA EXPERIMENT STATION.

In 1887 the Congress of the United States passed an Act appropriating \$15,000 per annum, from the proceeds of the sale of public lands, to each State and territory for the support and maintenance of an Agricultural Experiment Station. Under this Act the Station was to be conducted in connection with the Agricultural College in each State and Territory. The Governor of Georgia, in behalf of the General Assembly, accepted the tender of the appropriation, in June 1888, and preparations were at once made to organize a Station at Athens, Ga.

In December, 1888, however, the General Assembly of Georgia passed an Act taking the Station from the immediate control of the college authorities and providing for a Board of Directors for its management, consisting of one "practical and successful" farmer from each Congressional district, the State Commissioner of Agriculture, the Chancellor of the University and one member of the faculty of the State Agricultural College. The "farmer" members are appointed by the Governor for terms of five years, and the member of the college faculty is annually designated by the same authority.

Under authority of the State Act the Board of Directors, in May, 1889, removed the Station from Athens and located it one and a half miles north of the city of Griffin, the citizens of Spalding county having donated a fine farm of 130 acres and \$4,000 in cash. In a short time the Station Staff was organized by the election of R. J. Redding, director; Gustave Speth, horticulturalist and accountant, and James M. Kimbrough, agriculturalist and dairyman. Active operations commenced in September, 1889.

The Station is maintained exclusively by the fund received from the United States Treasury (\$15,000 per annum), together with the proceeds of the sale of farm products. The State provides nothing for its regular support, but has made three appropriations of \$5,000 each, for specific purposes, as shown in the following statement:

1. Donations from Spalding county:

Farm of 130 acres, valued at	\$10,000
Cash for building purposes	4,000

2. Appropriated by General Assembly:

In 1888 for establishing the Station (mainly expended for buildings).....	\$5,000
In 1891, for buildings	5,000
In 1892, for buildings and equipments	5,000



GEORGIA EXPERIMENT STATION, NEAR GRIFFIN.

The State pays the actual traveling expenses of the Board of Directors in attending quarterly meetings, but provides no compensation for their services. These expenses, amounting to about \$500 per annum, constitute the only regular charge on the State Treasury.

A quarterly report of all expenditures is made to the Governor, and an annual and detailed report at the close of each year.

PRESENT ORGANIZATION.

The organization of the Station at present (1901) is as follows:

R. J. Redding	Director.
H. C. White	Vice Director and Chemist.
A. L. Quaintance (resigned Aug. 1. '01) ..	Biologist and Horticulturalist.
J. M. Kimbrough	Agriculturalist.
H. J. Wing	Dairyman.
Miss Ruby R. Ritchie	Stenographer and Accountant.

EQUIPMENT.

The Station buildings comprise residences for the Director, Horticulturalist, Agriculturalist and Dairyman, and six three-room cottages for laborers; a frame horse and cattle stable and barn, with annexes for carriage house; calf barn, silo and manure shed; dairy building; chemical and biological laboratory with cellar and annex; propagating and greenhouse; tobacco barn; ginnery and tool house; engine house and stationary engine; carpenter and blacksmith shop; complete system of waterworks; steam pump, hydraulic ram, hydrants, house service, etc.

The station owns four mules, 30 head of cattle (mostly registered Jerseys), and a small herd of fine Berkshire swine.

The farm covers 130 acres, 80 of which are under cultivation, 35 in pasture and 15 in parks and lawns. In the above are included about 15 acres in orchards and vineyards.

The Station has a collection of about 2,500 named species of insects, besides many not yet determined; 2,000 named specimens in the herbarium, including economic *fungi*.

LINES OF WORK.

It has been the fixed policy of the Station to consult the immediate wants of the farmers of the State. These are, primarily, instruction in soil renovation, improved methods of preparation of soil and culture of the staple crops, and diversified farming. The work of the Station in the field has been fertilizer tests with different forms and sources and

combinations of plant food ingredients; different methods of culture; tests of varieties; improved methods of harvesting and (incidentally) trials of new inventions and improvements in farm implements and machinery.

The work in the Dairy and Livestock department has been mainly illustrative and demonstrative; the improvement of breeds and dissemination of young animals of the best strains among Georgia farmers.

SOME RESULTS.

The illustrative and demonstrative work of the Station has shown that the natural conditions of soil and climate are admirably adapted to the production of milk, butter and cheese of unexcelled quality, and the dairying and live-stock industry of the State has been thereby greatly encouraged.

The Station has discovered a method of sowing oats in the fall of the year so that the danger of winter killing is reduced to a minimum, and has thus greatly encouraged and developed the culture of oats. This method consists, essentially, in first thoroughly preparing the soil (corn stubble) by plowing and harrowing, and then drilling the selected seed oats in open furrows, 16 to 18 inches apart, at the rate of $1\frac{1}{2}$ to 2 bushels of seed per acre, applying at the same time a liberal amount of properly balanced fertilizer. The seed oats, falling from the drill spot to the bottom of the fresh furrow, are barely covered by the loose, falling soil and the weight of the operating wheel of the drill machine.

The Station has shown by careful and repeated experiments that corn may be successfully harvested in Georgia as it has long been practiced in the North, by cutting down the entire stalk a little later than the "pulling fodder" period and shucking the same, the whole (excepting the ears) to be afterwards shredded; and that the shredded corn stalks make an excellent roughage for horses, mules and cattle. If the entire crop of corn of Georgia be thus harvested the saving of valuable food that has heretofore been utterly neglected, would amount to 600,000 tons.

The Station has done valuable work along horticultural lines, and the tests of varieties, the investigation of the insect enemies and fungous diseases of fruits and vegetables and the means of combating them have been of great value to the fruit-growers and truck-farmers of the State.

The Station publishes at least one Bulletin of results every three months, or four to six Bulletins per annum. Some of these are profusely illustrated. These Bulletins are absolutely free to any citizen who is actively engaged in any branch of farming, including fruit and vege-

table culture, dairying and stock-breeding, who will request the same to be sent him. The law does not contemplate that they shall be sent at random or as "sample copies," but only to such persons as shall request them sent. Address "Georgia Experiment Station, Experiment, Ga."

NOTE—The above sketch of the Experiment Station was contributed by R. J. Redding, Director.

APPROPRIATIONS TO THE INSTITUTIONS OF THE STATE.

At the last session of the legislature the following sums of money were appropriated for and on account of the public institutions of the State, for each of the fiscal years 1901 and 1902:

For support and maintenance of the Academy of the Blind and for salaries of its officers, \$18,000, or so much thereof as may be necessary.

For repairs of the Academy for the Blind, \$4,000.

For support and maintenance of the school for the Deaf and Dumb, and pay of its officers and attachees, \$25,000, or so much thereof as may be necessary.

For the support and maintenance of the Georgia State Sanitarium (Asylum for the Insane), \$290,000, or so much thereof as may be necessary.

For the State University at Athens, the sum of \$8,000.

For the State University for the support of the School of Technology, \$40,000.

For the University of Georgia for the use of the State Technological School, for the purpose of erecting an electrical building, \$10,000, and for purchasing and providing equipment for the Textile Department of the same school, these last two appropriations not to become available until the trustees of the school shall have raised the sum of \$25,000 additional in money or equipment, by private subscription for said purpose.

For the State University for the support of the Georgia Normal and Industrial College for girls, at Milledgeville, \$22,900;.

For the State University for the support of the North Georgia Agricultural College, a branch of said University, \$7,000.

For the State University for the support of the State Normal School for teachers of both sexes, at the Rock College, at Athens, \$22,500.

For the University for the colored people, \$8,000.

For the support of the Common Schools, \$800,000 in addition to the school fund derived from taxation in the several counties.

For the State University at Athens the sum of \$22,500, to be used for its support and maintenance and for necessary repairs and buildings and the furnishing and equipping thereof; also to the trustees of the University, \$5,000 to be used in building and furnishing a dormitory

for girls at the North Georgia Agricultural College at Dahlonega, and for other purposes.

Also \$150,000 for the Georgia State Sanitarium at Milledgeville, to be used in erecting buildings and for other purposes.

APPROPRIATIONS FOR CONFEDERATE SOLDIERS AND THEIR WIDOWS.

The State appropriates to maimed and disabled Confederate soldiers \$190,000, and to indigent soldiers, \$300,000.

It also appropriates the sum of \$200,000 to the widows of such Confederate soldiers as may have died in the service of the Confederate States, or since from wounds received therein, or disease contracted in the service of the Confederate States, and to indigent widows of deceased Confederate soldiers who were the wives of such soldiers while they were in service.

THE HOME FOR CONFEDERATE SOLDIERS.

This institution, under the patronage of the State, was opened in July, 1901, and in a short while seventy-two veterans had been admitted to its privileges. On September 30, 1901, the Home was destroyed by fire. On the same day the Atlanta Journal rented a temporary home for the soldiers on Marietta Street, while the helpless were provided for in the Presbyterian and Grady Hospitals. To the \$21,500 insurance on house and furniture, the people of Georgia are adding liberal subscriptions, and a new Soldiers' Home will soon be erected and equipped with every modern convenience.

NEWSPAPERS AND PERIODICALS.

Although this is a chapter on the State government of Georgia, such is the influence of the Press in moulding the thoughts of the people and shaping legislation, that it may be fittingly introduced in this connection.

The number and kind of newspapers and periodicals published in a State afford some indication of the character of its people. Judged by this standard the people of Georgia are entitled to rank among the most progressive of the populations which compose the various commonwealths of the American Union. The enterprise and ability of some of the great daily and weekly journals of the State, both secular and religious, have largely increased the influence of Georgia on political and religious lines, and combined with the ability of some of her representatives in the national legislature, have given to our State high rank in the councils of the republic.



PEACH PACKING-HOUSE.

We append here a list of newspapers and periodicals, giving the name and character of each, the place of publication and whether daily or weekly.

Name	Character	How Published	Town and County.	
Chronicle	Democratic	Weekly	Abbeville,	Wilcox.
Post	"	"	Acworth,	Oobb.
Banner	"	"	Adairsville,	Bartow.
News	Democratic	"	Adel,	Berrien.
Herald	"	Daily and Weekly	Albany,	Dougherty.
Dispatch	Republican	Weekly		
Free Press	Democratic	"	Alpharetta,	Milton.
Evening Herald	"	Daily	Americus,	Sumter.
Times-Recorder	"	Daily and Weekly	"	"
Georgia Investigator	Republican	Weekly	"	"
Calhoun County Courier	Democratic	"	Arlington,	Calhoun.
Advance	"	"	Ashburn,	Worth.
South'n Field & Fireside.	Agricultural	Monthly	Ashwood,	Berrien.
Banner	Democratic	Daily and Weekly	Athens,	Clarke.
Clipper	Negro, Rep.	Weekly	"	"
Sentinel	Temperance.	"	"	"
Southern Farmer	Agricultural	Monthly	"	"
Woman's Work	Household	"	"	"
Constitution	Democratic	Daily, Weekly and Semi-Weekly and Sun.	Atlanta, Fulton.	
Journal	"	Daily, and Semi- Weekly	"	"
American Advertiser	Independent	Weekly	"	"
Benevolent Ensign	Negro	"	"	"
Business Directory ..	Business	"	"	"
Christian Index	Baptist	"	"	"
Georgia Record	"	"	"	"
Ga Staats Nachrichten	German	"	"	"
Jewish Sentiment	Jewish	"	"	"
Journal of Labor	Labor	"	"	"
Mail & Express	"	"	"	"
Market Reporter and Shippers Guide	"	"	"	"
National	Republican	"	"	"
Presbyterian	Presbyterian	"	"	"
Republican Leader	Republican	"	"	"
Saturday Review	Society	"	"	"
Southern Architect and Contractor	Architectur'l	"	"	"
So. Ohristian Recorder	African M E.	"	"	"
Southern Evangelist	Undenominat'l	"	"	"
Southern Star	Prohibition.	"	"	"
Wesleyan Christian Ad- vocate	Methodist Episcopal, S.	"	"	"
Southern Cultivator and Dixie Farmer	Agricultural	Semi-Monthly	"	"
Southern Home	"	"	"	"
Alkahest	Literary	Monthly	"	"
Church in Georgia	Protestant Episcopal	"	"	"
Cotton	Cotton Industry	"	"	"
Dixie	Mechanical	"	"	"
Georgia Eclectic	"	"	"	"
Medical Journal	Medical	"	"	"
Georgia Education	Educational	"	"	"
Ideas	Literary	"	"	"
Insurance Prospect	Insurance	"	"	"
Journal-Record of Med- icine	Medical	"	"	"

Name	Character	How Published	Town and County.
Pythian Lodge Secret.	Knights of Pythias	Monthly	Atlanta, Fulton.
Railroad Herald	Railroads	"	" "
So. eastern Underwriters	Insurance	"	" "
So. Congregationalist	Congregationist	"	" "
So. Educational Journal	Educational	Monthly	" "
Southern Fancier	Poultry	"	" "
So. Industrial News	Textile and Mechanical	"	" "
Southern Ruralist	Agricultural	"	" "
State, Town & County	"	"	" "
Sunny South	Literary	"	" "
Chronicle	Democratic	Daily & Semi-Weekly	Augusta, Richmond.
Herald	Ind.-Dem.	Daily and Weekly	" "
Tribune	Populist	"	" "
Georgia Baptist	Negro	Weekly	" "
Methodist Evangelist	Methodist-Episcopal	"	" "
Voice of Labor	Trades-Union	"	" "
Mission Field	Negro Meth.	"	" "
Dental Hints	Dentistry	Semi-Monthly	" "
Democrat	Democratic	Monthly	" "
Messenger	Republican	Weekly	Bainbridge Decatur.
Searchlight	Democratic	"	" "
Mountain Caucasian	"	"	Ball Ground, Cherokee.
Gazette	"	"	Barnesville, Pike.
Georgia Farmer	Agricultural	Semi-Monthly	" "
Banner	Democratic	Weekly	Baxley, Appling.
Times	"	"	Blackshear, Pierce.
Herald	"	"	Blairsville, Union.
Early County News	"	"	Blakely, Early.
Reporter	"	"	" "
Southern Pit Games	Poultry	Monthly	" "
Post-Record	Democratic	Weekly	Blue Ridge, Fannin.
Southern-World	"	"	" "
Intelligence	"	"	Bowdon, Carroll.
Times	Democratic	Daily	Brunswick, Glynn.
Evening Oall	"	"	" "
Herald	Negro	Weekly	" "
Banner-Messenger	"	"	Buchanan, Haralson.
Tribune	"	"	" "
Marion County Patriot	Democratic	"	Buena Vista, Marion.
Alliance Plow Boy	Populist	"	Buford, Gwinnett.
Herald	Democratic	"	Butler, Taylor.
Times	"	"	Calhoun, Gordon.
Clarion	"	"	Camilla, Mitchell.
American Union	Republican	"	Canon, Franklin.
Herald	Universalist	"	" "
Advance	Democratic	"	Canton, Cherokee.
Advance	"	"	Carnesville, Franklin.
Press	Populist	"	" "
Free Press	Democratic	"	Carrollton, Carroll.
People's Advocate	Independent	"	" "
Times	Democratic	"	" "
Courant-American	"	"	Cartersville, Bartow.
Eagle	Republican	"	" "
News	Democratic	"	" "
Advance Courier	"	"	Cedartown, Polk.
Standard	"	"	" "
Enterprise	Independent	"	Chiple, Harris.
Advertiser	Democratic	"	Clarks, Harris.
Press	"	"	Claxton, Tattnall.
Tribune	"	"	Clayton, Rabun.
Courier	Independent	"	Cleveland, White.
Liberal	Democratic	"	Colquitt, Miller.

Name	Character	How Published	Town and County
Enquirer-Sun	Democratic	Daily(except.Mon)	Columbus, Muscogee.
" "	"	Sunday	" "
" "	"	Weekly	" "
Ledger	"	Daily(except Sat eve.)	" "
" "	"	Sunday	" "
" "	"	Weekly	" "
So. Unionist	Labor	"	" "
Banner Weekly	Democratic	Weekly	Conyers, Rockdale.
Call	"	Daily	Cordele, Dooly.
Sentinel	"	Weekly	" "
Enterprise	"	"	Covington, Newton.
Star	"	"	" "
Advocate-Democrat	"	"	Crawfordville, Taliaferro.
Herald	"	"	Culloden, Monroe.
Baptist	Baptist	"	Cumming, Forsyth.
Leader	Democratic	"	Cuthbert, Randolph.
Liberal Enterprise	"	"	" "
Nugget	Independent	"	Dahlonega, Lumpkin.
Signal	Populist	"	" "
New Era	Democratic	"	Dallas, Paulding.
Argus	"	"	Dalton, Whitfield.
Citizen	"	"	" "
Herald	Populist	"	" "
Music Teacher	Musical	"	" "
Argus	Democratic	"	Danielsville, Madison.
Monitor	"	"	" "
Gazette	Independent	"	Darien, McIntosh.
Spectator (Colored)	"	"	" "
News	Democratic	"	Dawson, Terrell.
Advertiser	"	"	Dawsonville, Dawson.
New Era	"	"	Decatur, DeKalb.
Our Missionary Helper	Populist	"	" "
Standard	Democratic	"	" "
Advertiser	"	"	Doe Run, Colquitt.
Breeze	"	"	Douglas, Coffee.
New South	"	"	Douglasville, Douglas.
Courier-Dispatch	"	Semi-weekly	Dublin, Laurens.
Times-Journal	"	Weekly	Eastman, Dodge.
Plow Boy	Independent	"	East Point, Fulton.
Messenger	Democratic	"	Eatonton, Putnam.
Star	"	"	Elberton, Elbert.
Tribune	"	"	" "
News	"	"	Ellaville, Schley.
Courier-Sentinel	"	"	Ellijay, Gilmer.
Times	"	"	" "
News	"	"	Fairburn, Campbell.
News	"	"	Fayetteville, Fayette.
Citizen-Leader	Republican	"	Fitzgerald, Irwin.
Enterprise	Independent	"	" "
Journal	"	"	Flowery Branch, Hall.
Advertiser	Democratic	"	Forsyth, Monroe.
Chronicle	"	"	" "
Critic (Colored)	Republican	"	" "
Sentinel	Democratic	"	Fort Gaines, Clay.
Leader	"	"	Fort Valley, Houston.
News and Banner	"	"	Franklin, Heard.
Cracker	"	"	Gainesville, Hall.
Eagle	"	"	" "
Journal	"	"	Georgetown, Quitman.
Record	"	"	Gibson, Glascock.
News	"	"	Gray, Jones.
Herald	Independent	"	Graymond, Emanuel.
Herald-Journal	Democratic	"	Greensboro, Greene.
Vindicator	"	"	Greenville, Meriwether.
Call	"	Daily	Griffin, Spalding.

Name	Character	How Published	Town and County
Farmer	Democratic	Weekly	Griffin, Spalding.
Echo (Colored)	Republican	"	"
News and Sun	Democratic	Daily	"
"	"	Weekly	"
News	Independent	"	Guyton, Effingham.
Journal	Democratic	"	Hamilton, Harris.
People's Cause	Independent	"	Harlem, Columbia.
Sentinel	Democratic	"	"
Citizen	"	"	Harmony Grove, Jackson.
Sun	"	"	Hartwell, Hart.
Dispatch and News	"	"	Hawkinsville, Pulaski.
Independent (Colored)	Republican	Bi-Weekly	"
Herald	Democratic	Weekly	Hinesville, Liberty.
Headlight	Independent	"	Hogansville, Troup.
Farmer and Dairyman	Agricultural	Semi-Monthly	Holton, Bibb.
Journal	Democratic	Weekly	Homer, Banks.
News	"	"	Homerville, Clinch.
Bulletin	"	"	Irwinton, Wilkinson.
News	Independent	"	Isabella, Worth.
Argus	Democratic	"	Jackson, Butts.
Record	"	"	"
Progress	"	"	Jasper, Pickens.
Herald	"	"	Jefferson, Jackson.
Herald	"	"	Jeffersonville, Twiggs.
News	"	"	Jesup, Wayne.
Sentinel	Populist	"	"
Enterprise	Democratic	"	Jonesboro, Clayton.
News	Populist	"	"
Correspondent	Democratic	"	Knoxville, Crawford.
Messenger	Independent	"	LaFayette, Walker.
Enterprise	"	"	LaGrange, Troup.
Graphic	Democratic	"	"
Reporter	"	Daily	"
"	"	Weekly	"
Republican	Rep'n (Col.)	"	"
Standard Gauge	Independent	"	Lavonia, Franklin.
News Herald	Democratic	"	Lawrenceville, Gwinnett.
Echo	"	"	Lexington, Oglethorpe.
Journal	Populist	"	Lincolnton, Lincoln.
Leader	Democratic	"	Lindale, Floyd.
News and Farmer	"	"	Louisville, Jefferson.
Advertiser	"	"	Lumpkin, Stewart.
Independent	"	"	"
Weekly	"	"	McDonough, Henry.
Appeal (Colored)	Republican	"	Macon, Bibb.
Georgia Planter	Agricultural	Monthly	"
News	Democratic	Daily	"
So. Dental Journal	Dental	Quarterly	"
Sunday Press	Democratic	Weekly	"
Telegraph	"	Daily	"
"	"	Sunday	"
"	"	Semi-Weekly	"
Enterprise	"	Weekly	McRae, Telfair.
News	Independent	"	"
Adviser	Democratic	"	Madison, Morgan.
Gleaner (Colored)	Republican	"	"
Madisonian	Democratic	"	"
Critic	Independent	Daily	Marietta, Cobb.
Journal	Democratic	Weekly	"
Guidon	"	"	Meldrim, Effingham.
Union-Recorder	"	"	Milledgeville, Baldwin.
Banner	Independent	"	Mitchell, Glascock.
News and Messenger	Democratic	"	Monroe, Walton.
Tribune	Independent	"	"
Record	Democratic	"	Montezuma, Macon.
Advocate	"	"	Monticello, Jasper.
News	"	"	"

Name	Character	How Published	Town and County
Courier	Independent	"	Moultrie, Colquitt.
Observer	Democratic	"	"
Protectionist	Republican	"	Mount Airy, Habersham.
Monitor	Democratic	"	Mt. Vernon Montgomery.
Georgian	"	"	Nashville, Berrien.
Herald and Advertiser	"	"	Newnan, Coweta.
News	"	Daily	"
"	"	Weekly	"
News	Independent	"	Newton, Baker.
Tribune	Democratic	"	Norcross, Gwinnett.
Dispatch	"	"	Ocilla, Irwin.
Citizen	"	Semi-Weekly	Oglethorpe, Macon.
Emory College Phoenix	College	Monthly	Oxford, Newton.
Enterprise	Democratic	Weekly	Pembroke, Bryan.
Southern Informer	Independent	"	"
Home Journal	Democratic	"	Perry, Houston.
Advertiser	"	"	Quitman, Brooks.
Free Press	"	"	"
Journal	"	"	Reidsville, Tattnall.
Banner	Independent	"	Richland, Stewart.
New South	Democratic	"	Ringgold, Catoosa.
Inquirer	"	"	Riverdale, Clayton.
New Era	"	"	Rochelle, Wilcox.
Slate	Independent	"	Rockmart, Polk.
Oherokee Messenger	Missionary	Monthly	Rome, Floyd.
Chronicle	Independent	Daily	"
"	"	Sunday	"
Commercial Argus	Democratic	Daily	"
Southern Argus	"	Weekly	"
Masonic Herald	Masonic	Monthly	"
Tribune	Democratic	Daily	"
"	"	Weekly	"
Herald	"	"	Sandersville, Washington.
Progress	"	"	"
Baptist Truth	Baptist	"	Savannah, Chatham.
Bulletin	Democratic	"	"
Gazette (Colored)	Republican	"	"
Journal of Medicine and Surgery	Medical	Monthly	"
Musical Echo	Musical	"	"
News	Democratic	Daily	"
"	"	Semi-Weekly	"
Press	"	Daily	"
South'n Drug and Paint Review	Pharmacy	Monthly	"
Spy	Republican	Weekly	"
Tribune (Colored)	"	"	"
Enterprise-Gazette	Democratic	"	Senoia, Coweta.
Watchman	Republican	"	Sharon, Taliaferro.
Journal	Democratic	"	Smithville, Lee.
Sentry	"	"	Social Circle, Walton.
Ishmaelite	"	"	Sparta, Hancock.
Jimplecute	"	"	Spring Place, Murray.
Herald	"	"	Statesboro, Bulloch.
Star	Populist	"	"
Times	Democratic	"	"
News	"	"	Summerville, Chattooga.
Blade	Independent	"	Swainsboro, Emanuel.
Pine Forest	Democratic	"	"
People's Press	Populist	"	Sylvania, Screven.
Telephone	Democratic	"	"
Local	"	"	Sylvester, Worth.
New Era	"	"	Talbotton, Talbot.
Journal	Independent	"	Tallapoosa, Haralson.
Echo	"	"	Tallulah Falls, Rabun.
News	"	Semi-Weekly	Tennille, Washington.

Name	Character	How Published	Town and County
Times	Democratic	Weekly	Thomaston, Upson.
News	"	"	Thomasville, Thomas.
Times-Enterprise	"	Daily	"
"	"	Weekly	"
Journal	"	"	Thomson, McDuffie.
Gazette	"	"	Tifton, Berrien.
Southern Record	"	"	Toccoa, Habersham.
News	Independent	"	Trenton, Dade.
Herald	Democratic	"	Trion Factory, Chattooga.
Passport	"	"	Unadilla, Dooly.
Afro-Am. Mouthpiece	(Colored)	"	Valdosta, Lowndes.
Plaindealer	" Rep'n	"	"
Times	Democratic	"	"
Progress	"	"	Vienna, Dooly.
Hustler	"	"	Villa Rica, Carroll.
Banner	"	"	Wadley, Jefferson.
Clipper	"	"	Warrenton, Warren.
Chronicle	"	"	Washington, Wilkes.
Gazette	"	"	"
Georgia Reporter	"	"	"
Enterprise	Independent	"	Watkinsville, Oconee.
Herald	Democratic	Daily	Waycross, Ware.
"	"	Weekly	"
Journal	"	"	"
True Citizen	"	"	Waynesboro, Burke.
News	Independent	"	West Point, Troup.
Democrat	Democratic	"	Winder, Jackson.
Jackson Economist	Populist	"	"
Georgian	Democratic	"	Woodbine, Camden.
Messenger	Independent	"	Woodbury, Meriwether.
Headlight	Democratic	"	Wrightsville, Johnson.
Record	Populist	"	"
News	Independent	"	Young Harris, Towns.
Journal	Democratic	"	Zebulon, Pike.
Republican	Republican	"	"



GEORGIA EXHIBIT, AGRICULTURAL BUILDING, NASHVILLE, TENN., 1897.



PART II.

SKETCHES OF THE COUNTIES.

These sketches contain information concerning the history, soil, productions, live stock, manufactures, population, etc. of each county in the State.

In each instance the total population of the county is given, and also the population by sex and color. The United States census for 1900 gives the population by sex and color for every place having 2,500 inhabitants or more in its corporate limits. There are thirty-one such places in Georgia, and this information is given concerning each of these in the sketch of its county.

The live stock statistics are from the census of 1890, and in the Appendix will be found the live stock statistics for 1900, if they can be obtained in time. If this information cannot be had, before this book is issued from the press, a pamphlet containing this and other useful knowledge will be sent to each one having a copy of this work.

The statistics of domestic animals not on farms or ranges, include all domestic animals in cities, towns and villages; in stock-yards; all employed in manufacturing, lumbering and mining industries, and kindred enterprises; and all used for pleasure or profit by individuals other than farm proprietors. The number of live stock in cities containing over 25,000 inhabitants in their corporate limits is given separately.

There are three such cities in Georgia: Atlanta, Savannah and Augusta.

Similar statistics have never before been collected in the United States. The census authorities say: "It was deemed unwise to delay, for several months, the publication of these tables in order to include the further statistics" on live stock on farms or ranges in each county in 1900.

The statistics for domestic animals in barns and inclosures for the whole State June 1, 1900 show 29,713 inclosures. Of these there are 17,355 inclosures reporting neat cattle, in which are 36,720 neat cattle, including 8,393 calves under one year old, 1,614 steers one and under two years old, 773 steers two and under three years, 1,624 steers three

years and over, 465 bulls one year and over, 2,052 heifers one and under two years, 20,806 dairy cows two years and over, 1,893 other cows two years and over. There are 12,052 inclosures reporting horses, in which are 21,016 horses, 117 colts under one year, 222 colts one and under two years, 20,677 horses two years old and over. The 2,395 inclosures containing 7,540 mules, include 30 colts under one year, 106 colts under two years, and 7,404 mules two years old and over. Sixty-eight inclosures contain 126 donkeys. Ninety-seven inclosures report 5,745 sheep, of which 1,147 are lambs under one year, 2,499 ewes of one year and over, 2,099 rams and wethers of one year and over. In 13,209 inclosures there are 39,538 swine and in 608 inclosures are 2,045 goats.

The Appendix contains many valuable tables.

The native born population of Georgia numbers 1,095,598 males and 1,108,330 females; the foreign born, 7,603 males, and 4,800 females. The total population is 2,216,331.

The native white with native parents number 573,447 males and 570,728 females. Of native white with foreign parents there are 12,309 males and 12,604 females. Of foreign white there are 7,283 males and 4,738 females.

The total white population is 1,181,109. Of these there are 593,039 males and 588,070 females. The total negro population of the State is 1,034,998, of whom there are 509,958 males and 525,040 females.

There are also 204 Chinese—192 males and 12 females, 1 male Jap, 11 male and 8 female Indians.

APPLING COUNTY.

Appling County, in the southeastern part of the State, named after Colonel Daniel Appling, of Columbia county, was laid out in 1818. Part of it was added to Telfair in 1818, part to Ware in 1824 and part again to Telfair in 1825. It is bounded by the following counties: Montgomery and Tattnall on the north, Wayne on the east, Pierce and Ware on the south and Coffee on the west. On the north are the Ocmulgee and Altamaha rivers, which streams and their tributaries, with the headwaters of the Satilla river, viz.: Dougherty's and Carter's creeks, Little Satilla river, Big Hurricane and Little Hurricane creeks, water the county.

Appling county is in the great pine belt, and therefore the principal industries are turpentine and lumber. Large numbers of logs are yearly rafted down the Altamaha river to Darien.

The lands are level and are especially adapted to long-staple or sea-island cotton, and according to the United States census of 1900 the cotton ginned in the county for the season of 1899 and 1900 was 4,046

bales, of which 3,778 bales were sea-island and 268 bales upland. Some of the lands under proper cultivation can be made to yield to the acre: sea-island seed cotton, 500 to 1,000 pounds; corn, 15 to 25 bushels; oats, 20 to 30 bushels; rice, 10 bushels; Irish potatoes, 100 bushels; sweet potatoes, 200 bushels; field peas, 10 to 15 bushels; ground peas, 15 to 30 bushels; crab-grass and peavine hay, 2,000 to 3,000 pounds; corn fodder, 200 to 400 pounds; sugar-cane syrup, 250 to 500 gallons. Pears and grapes grow to perfection and many other fruits do well.

The wild native grasses afford splendid pasturage for cattle and sheep, which can be raised at very small expense.

According to the United States census of 1890 there were 11,583 sheep, with a wool clip of 23,081 pounds; 16,152 cattle, 4,254 milch cows, 311 working oxen, 17,224 hogs, 40,027 poultry of all kinds, 819 horses, and 307 mules. The county produced 54,456 dozens of eggs, 8,544 pounds of honey, 11,084 pounds of butter, and 192,070 gallons of milk.

The creeks and rivers abound in fish excellent for the table. The climate is warm, but not oppressive, and the people are healthy.

The county is well supplied with churches and schools. Methodists and Baptists predominate. Schools for whites number 60; for colored, 17. Average attendance in white schools 1,417, in colored 487.

There are no large towns in the county. Baxley, the county seat, on the Southern Railway, is the most important.

There are postoffices at Baxley, Graham, Hazlehurst, Surrency, Blarney, Peyton, Ritch, Medders, Spencer and Elma.

At Baxley a syrup refinery has been recently completed and incorporated. The proprietor of the refinery guarantees not less than 25 cents a gallon cash. With the same careful and scientific culture that is bestowed by some planters upon the crop, 500 gallons of first-class syrup can be produced to the acre on ordinarily fertile land, and with one-half the labor required for the cultivation of cotton. The people of Baxley are the proprietors of this refinery and expect great results from it. The ponds in the neighborhood of the town, hitherto regarded as of no practical benefit, will soon be in great demand.

Mr. C. W. Deen, who owns \$1,600 worth of stock in the refinery, proposes to plant this year (1901) 50 acres in sugar cane, and expects to make a clear profit of \$100 an acre.

The area of Appling county is 775 square miles, or 496,000 acres.

Population by the census of 1900 is 12,336. School fund, \$7,993.41. By the Comptroller-General's report for 1900 there are 382,828 acres of improved land; of wild lands, 200,263; average value per acre of improved land, \$1.42; of wild land, \$0.57; city and town property, \$120,989; shares in bank, \$10,000; money and solvent debts, \$138,588; value of merchandise, \$73,505; capital invested in shipping and tonnage, \$4,020; stocks and bonds, \$1,350; cotton manufactories, \$11,475; capital invested in mining, \$525; value of household and kitchen furniture, \$88,260; farm and other animals, \$244,092; plantation and mechanical tools, \$30,880; watches, jewelry and silver plate, \$4,989; value of all

other property, \$97,493; real estate, \$766,787; personal estate, \$707,898; aggregate value of whole property, \$1,474,687.

Property returned by colored taxpayers: Acres of land, 15,202; value of land, \$24,267; city or town property, \$6,064; money and solvent debts, \$699; merchandise, \$410; household and kitchen furniture, \$6,376; watches, jewelry and silver plate, \$162; farm and other animals, \$11,896; plantation and mechanical tools, \$1,689; aggregate value of all property, \$52,844.

The population of Appling county in 1900 shows an increase of 3,660 over that of 1890. This is a gain of 42.1 per cent.

Population of Appling county by sex and color, according to census of 1900: white males, 4,539; white females, 4,284; total white, 8,823; colored males, 1,961; colored females, 1,552; total colored, 3,513.

Domestic animals kept in barns and inclosures, not on farms or ranges, June 1, 1900: 63 calves, 6 bulls, 8 steers, 118 dairy cows, 81 horses, 58 mules, 286 swine, 37 goats.

BAKER COUNTY.

Baker County was laid out from Early in 1825, and was named after Colonel John Baker of Revolutionary fame. It is bounded on the north by Calhoun and Dougherty counties, east and southeast by Mitchell, south by Mitchell, Decatur and Miller, and west by Early and Miller. Newton, on the west bank of the Flint river, is the county seat. Other postoffices are Cheeverton, Hoggard's Mill, Mimsville and Milford. The county is watered by the Flint river and its tributaries, the Coolewahee, Ichawaynochaway and Chickasawhatchee creeks, all of which abound in fish. The county has lands in which oak and hickory predominate, and others in which the long-leaf pine is the prevailing growth. The former lands are dark and much more productive than the latter, which are gray. With the exception of the pine lands the county used to be considered unhealthy. But the boring of artesian wells and the use of their water, instead of the rotten limestone, has brought about a great change for the better. The face of the county is level.

Under the ordinary methods of cultivation the yield per acre is: Seed cotton, 600 to 800 pounds; corn, 10 to 15 bushels; wheat, 15; oats, 20; rye, 8 to 10; upland rice, 25 bushels; sugar-cane, 300 gallons; sorghum cane, 50 to 75 gallons; Irish potatoes, 50 to 150 bushels; sweet potatoes, 100 to 250; sorghum forage, 10,000 pounds. All grasses and forage crops except clover do well.

According to the United States census of 1900 the cotton ginned in the county for the season of 1899-1900 was 4,039 bales, all upland.

According to the United States census of 1890 there were 1,510 sheep, with a wool-clip of 2,849 pounds; 7,859 cattle, 2,586 milch-cows, 675 working oxen, 9,809 hogs, 30,527 poultry of all kinds, 567 horses, 724 mules and 2 asses. Among the productions were 181,645 gallons of milk, 25,285 pounds of butter, 83,172 dozens of eggs, and 1,660 pounds of honey.



GEORGIA EXHIBIT AT NASHVILLE, TENN.

The people are beginning to pay considerable attention to the raising of beef cattle and improvement of the breed. Within the last five years there have been imported into the county 5 Hereford, 4 Polled Angus and 6 Shorthorn bulls. For dairy purposes the Jersey cow is preferred.

About 1,500 acres are given to peach trees, 700 to plums, 110 to cherries, 500 to quinces and 300 to apples. About 100 acres are given to the raising of melons, and large watermelons of excellent flavor are grown for the market.

The chief industries of the piney woods section of the county are those connected with turpentine and lumber. Six sawmills are kept busy preparing lumber, 5 turpentine distilleries turn out large quantities of naval stores and 5 grist mills are kept in constant operation.

Though no railroads traverse the county, the Central of Georgia has a branch road running near the county line on the north; a branch of the Plant System runs close to the line from the northeast southward, and the Georgia Pine Railroad passes close by the boundary on the western side. Lines of steamboats on the Flint river ply regularly between Newton and Albany to the north, and Bainbridge to the south. The county schools are in good condition. Churches are plentiful, especially those of the Methodists and Baptists.

The area of Baker county is 366 square miles, or 234,240 acres.

Population by the census of 1900, 6,704; school fund, \$4,515.94. According to report of Comptroller-General for 1900 there are: Acres of improved land, 189,150; of wild land, 15,405; average value per acre of improved land, \$1.75; of wild land, \$1.00; city and town property, \$16,480; money and solvent debts, \$21,960; value of merchandise, \$24,180; value of household and kitchen furniture, \$18,296; farm and other animals, \$73,977; plantation and mechanical tools, \$11,599; watches, jewelry and silver plate, \$1,110; value of all other property, \$27,644; real estate, \$364,212; personal estate, \$183,541; aggregate value of whole property, \$547,753.

Property returned by colored taxpayers: Acres of land, 6,898; value of same, \$12,629; money and solvent debts, \$699; household and kitchen furniture, \$4,579; plantation and mechanical tools, \$3,168; farm and other animals, \$17,252; watches, jewelry and silver plate, \$67; aggregate value of all property, \$38,317.

The schools belong to the public school system and number 15 for white pupils and 17 for colored, with average attendance of 280 whites and 430 negroes.

Population of Baker county by sex and color, according to the census of 1900: white males, 957; white females, 977; total white, 1,934; colored males, 2,377; colored females, 2,393; total colored, 4,770.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: No report.

BALDWIN COUNTY.

Baldwin County was first laid off by the lottery act of 1803. Parts were added from Washington, Wilkinson and Hancock in 1807; parts again from Washington in 1812, and another part from the same county in 1826. The county was organized in 1805 and named for Hon. Abraham Baldwin, United States Senator, and one of the founders of Franklin College, the oldest department of the University of Georgia. Baldwin is bounded by the following counties: Putnam on the north, Hancock on the northeast and east, Washington on the east, Wilkinson on the south and Jones on the west.

The Oconee river runs through the middle of the county, and into this empty Town, Fishing and other creeks. Near Milledgeville are shoals which can be cheaply utilized, and which would furnish immense water-power, the gross available horse-power of the county being about 2,859. The water is freestone. The upper portion of the county belongs to the metamorphic region, and has red clay top-soil with a stiff clay subsoil. The lower portions belong to the tertiary formation, and have gray sandy lands. The gray lands give good returns for careful culture. The red lands are fertile, when fresh, and, even when they have been exhausted by careless farming, can be easily renovated and restored to their former high state of cultivation.

The average yield to the acre of the various crops is: Corn, 10 bushels; oats, 13 bushels; wheat 9 bushels; field-peas, 10 bushels; ground-peas, 15 bushels; Irish and sweet potatoes, 100 bushels each; seed cotton, 600 pounds; crab-grass and bermuda hay, 2,500 pounds; sugar-cane syrup, 150 gallons. On some of the best cultivated lands there are much better yields, as for instance, corn, 20 bushels; oats, 25 bushels; wheat, 15 bushels; seed cotton, 800 pounds. According to the United States census of 1900 the cotton ginned in this county of the crop of 1899 amounted to 10,119 bales, all upland.

There are in Baldwin county 33,528 peach trees and 3,039 apple trees.

Vegetables are raised in sufficient quantity for home use. The vegetables and fruits sold annually amount to between \$7,000 and \$8,000.

The timber products are small and are mainly hard woods in the northern part of the county, such as oak, hickory, ash, maple, etc. In some sections there still remains a little yellow pine. The annual output of all the timbers is about \$8,000 worth.

The especial mineral product of this county is pottery clay. Nine miles south of Milledgeville on the Gordon and Covington branch of the Central of Georgia Railroad is Stevens' Pottery, located on one of the finest clay deposits in America, which extends from Augusta south-westerly through Baldwin county, past Macon, in Bibb county, to Columbus, in Muscogee county. The clays of this belt are very pure, of a beautiful white color and capable of standing a greater degree of heat than any other clays of the United States. At Stevens' Pottery brick, sewer-pipe, jars, vases and many kinds of ornamental work are turned out in large quantities.



OLD CAPITOL AT MIDDLEBURY.

The United States census of 1890 showed that there were in Baldwin county 283 sheep, with a wool-clip of 314 pounds; 3,802 cattle, of which 200 were working oxen and 1,384 milch cows; 6,364 hogs, 34,985 domestic fowls of all kinds, 507 horses, 1,205 mules and 1 donkey. Among farm products were 262,179 gallons of milk, 59,677 pounds of butter, 46,169 dozens of eggs and 6,296 pounds of honey.

Milledgeville, the county site, was the capital of Georgia from 1807, when the legislature held its first session there, until 1868, when the capital was moved to Atlanta by the reconstruction government. This action was sustained by a vote of the State in 1877. Since then Milledgeville has become a great educational center. The old capitol, a building in the gothic style of architecture, is now a well-equipped school known as the Georgia Military and Agricultural College. The Georgia Normal and Industrial College for young ladies is also located in Milledgeville, the building being a handsome structure well fitted up for the best kind of work.

The Georgia and Central Railroads cross each other at Milledgeville, the former running east and west, and the latter north and south through the county, thus giving the very best of transportation facilities. Milledgeville, which, according to the United States census of 1900, has a population of 4,219, does a thriving commercial business and has several manufactories, such as a fertilizer factory, oil-mill, grain mill, repair shops and many small industries. All the manufactories of Baldwin county number 41 and have an annual output of \$242,942. Some of the most important are at and near Milledgeville. This city is lighted by electricity and has successful building and loan associations and banking institutions, with capital adequate for the business of the city. Besides the educational institutions already named, Milledgeville has excellent schools belonging to the public school system of Georgia, and some good private schools.

The Methodists, Baptists, Presbyterians and Episcopalians have flourishing churches.

About two miles from Milledgeville, at Midway, is the State Asylum for the Insane, which has handsome and convenient buildings fitted up with all modern appliances. The white and colored patients are kept entirely separate in buildings apart from each other, but furnished with equal conveniences.

At Midway, in ante-bellum days, stood Oglethorpe University, a college under the auspices of the Presbyterian church. After the civil war the university was removed to Atlanta, but after a few years its doors were closed, and its exercises have never been resumed.

Scottsborough, four miles south of Milledgeville, is a pleasant summer residence. The village has never been incorporated, but the Scottsborough militia district contains 5,455 inhabitants.

The public schools of Baldwin county number 46. In the 21 schools for whites the average attendance is 635 out of a total enrollment of

949 pupils, and in the 25 schools for colored there is an average attendance of 827 out of a total enrollment of 1,479 pupils. In the colleges and private schools of Milledgeville there is an attendance of about 700 pupils. By the report of the State School Commissioner for 1900 the school fund of Baldwin county is \$10,451.82.

The area of Baldwin county is 250 square miles, or 160,000 acres.

According to the United States census of 1900 the population of Baldwin county is 17,768, or 3,160 more than in 1890.

The report of the Comptroller-General for 1900 is as follows: Acres of improved land, 145,662; average value per acre, \$3.47; value of city or town property, \$549,992; shares in bank, \$90,000; gas and electric lights, \$7,500; money and solvent debts, \$118,698; value of merchandise, \$108,912; stocks and bonds, \$3,500; cotton manufactories, \$6,680; iron works, \$4,300; household and kitchen furniture, \$84,202; farm and other animals, \$82,762; plantation and mechanical tools, \$21,254; watches, jewelry, etc., \$10,325; value of all other property, \$72,872; real estate, \$1,056,893; personal estate, \$660,198; aggregate value of whole property, \$1,717,091.

Property returned by colored taxpayers: Number of acres of land, 5,980; value of the same, \$24,664; value of city or town property, \$45,770; merchandise, \$700; household and kitchen furniture, \$8,079; watches, jewelry, etc., \$154; farm and other animals, \$16,046; plantation and mechanical tools, \$3,052; value of all other property, \$1,075; aggregate value of whole property, \$100,041.

Population of Baldwin county by sex and color, according to the census of 1900: white males, 3,087; white females, 3,424; total white, 6,511; colored males, 5,400; colored females, 5,857; total colored, 11,257.

Population of Milledgeville by sex and color, according to the census of 1900: white males, 697; white females, 858; total white, 1,555; colored males, 1,138; colored females, 1,526; total colored, 2,664.

Total population of city, 4,219.

Domestic animals in Baldwin county, kept in barns and inclosures, not on farms or ranges, according to the census of 1900: 17 calves, 29 steers, 4 bulls, 99 dairy cows, 156 horses, 35 mules, 182 swine, 3 goats.

There are 5 flour and grist-mills on the Oconee and its tributaries. There are several sawmills (the exact number not ascertained), and a very extensive pottery establishment.

BANKS COUNTY.

Banks County was formed from Habersham and Franklin counties in 1858, and belongs to the northeast section of the State. It is bounded by the following counties: Habersham on the north, Franklin on the east, Madison on the south and Hall and Jackson on the west. It was named in honor of Dr. Richard Banks, of Gainesville, who was a noted surgeon.

The lands are rolling, rich on the water courses and moderately fertile elsewhere.

The timber products are poplar, hickory, pine, maple, ash, walnut, locust, white, post and mountain oak.

There is considerable granite in sections.

The Hudson flows from north to south through the county, and the Middle Fork through its northeast corner. These two uniting with the North Fork form Broad river, which flows into the Savannah. The Hudson and Middle Fork afford ample water-power for propelling ordinary machinery for mills and factories.

The climate is healthy and invigorating. The water is pure freestone.

Two railroads belonging to the Southern System—one on the northwestern, the other on the southwestern border of the county—give facilities for travel and transportation. Bellton, at the junction of these two lines, is partly in Banks and partly in Hall county. Alto and Baldwin are partly in Banks and partly in Habersham, and Maysville is partly in Banks and partly in Jackson. Homer, five miles from the railroad, is the county seat.

The productions of Banks county are corn, cotton, wheat, rye, oats, peas, sweet and Irish potatoes, cabbages, onions and other vegetables.

Under ordinary methods of cultivation the average yield of the various crops to the acre is as follows: Seed cotton, 500 pounds; corn, 8 to 10 bushels; wheat, 8 to 10 bushels; oats, 12 bushels; rye, 10 bushels; sorghum, 25 to 40 gallons of syrup; sorghum forage, 12,000 pounds to the acre; sweet potatoes, 100 bushels; field-peas, 10 bushels; hay, from clover, bermuda grass or the vetches, 3,000 pounds. Under the best methods of cultivation there are much larger yields of corn and wheat.

The United States census of 1900 reported that 8,791 bales of upland cotton were ginned in this county in 1899-1900. About 600 bales from this county were used by cotton mills.

The principal forage crops are peavines and sorghum. As far as known one farmer has a silo pit. Bermuda grass is the favorite for summer pasturage. A common feed for stock is cotton-seed meal and hulls, or sorghum, green corn, peas and vines.

There are in Banks county three dairy farms, making 540 pounds of butter in a week, for which they find a ready sale.

The number of dairy and other milch-cows is 106, the Jersey being preferred to all others. Renewed interest is being taken in the improvement of the breeds of cattle, as is shown by the fact that Polled Angus and Shorthorn bulls are being introduced into the county.

According to the report of the United States census there were in 1890 in Banks county 1,926 sheep, with a wool-clip of 2,608 pounds; 3,680 cattle, 413 being working oxen and 1,254 being milch-cows; 5,053 hogs, 68,194 domestic fowls of all varieties, 442 horses, 836 mules and 1 donkey. Among the farm products were 369,991 gallons of milk, 128,457 pounds of butter, 16,568 pounds of honey and 62,849 dozens of eggs. The average value of poultry and eggs over and above home consumption is \$15,000.

The acreage of fruits is as follows: 500 acres for peaches and about the same for apples; 200 acres each for grapes and cherries, and 50 for pears.

The game of the county is quail and hares (commonly called rabbits), of which great numbers are shipped to Atlanta.

For the past few years a great deal of lumber has been cut and shipped from Banks county, probably about 1,000 cars per annum. The getting out of this lumber gives employment to 25 sawmills, run mostly by steam.

The 15 or more grain mills of the county are run by water.

At Maysville, which is partly in Banks and partly in Jackson, a considerable amount of cotton is shipped. Here there is a bank with a capital of \$20,000. The total population of this town is 453, of whom 309 live in Banks county.

A cotton mill is projected, to be built near Baldwin, on the border of Banks and Habersham counties.

The Baptists, Methodists and Presbyterians are the leading Christian denominations, each of them having flourishing churches.

Banks county has some good private schools, and a good system of public schools, in which there is an average daily attendance of 1,750 pupils in the 35 schools for whites and 400 in the ten schools for negroes.

According to the report of the State School Commissioner for 1900 the public school fund of Banks county was \$7,288.81.

By the United States census of 1900 the population of Banks county was 10,545, an increase of 1,983 since 1890.

The land area of Banks county is 216 square miles, or 138,240 acres.

The following items are taken from the Comptroller-General's report for 1900: Acres of improved land, 131,868, with an average value of \$4.73 per acre; acres of wild land, 202, with no value reported; value of city or town property, \$54,113; money and solvent debts, \$80,896; value of merchandise, \$22,300; value of household and kitchen furniture, \$45,266; value of farm and other animals, \$113,725; of plantation and mechanical tools, \$28,539; watches, jewelry, etc., \$1,686; value of all other property, \$19,712; real estate, \$639,793; personal estate, \$322,821; aggregate value of whole property, \$939,094.

Property returned by colored taxpayers: Number of acres of land, 3,544; value of lands, \$11,294; city or town property, \$575; money and solvent debts, \$185; household and kitchen furniture, \$2,177; watches, jewelry, etc., \$19; farm and other animals, \$6,089; plantation and mechanical tools, \$1,010; value of all other property, \$119; average value of whole property, \$21,468.

Population of Banks county by sex and color, according to the census of 1900: white males, 4,216; white females, 4,232; total white, 8,448; colored males, 1,075; colored females, 1,022; total colored, 2,097.

Domestic animals in barns and inclosures not on farms or ranges, according to the census of 1900: 25 calves, 5 steers, 51 dairy cows, 30 horses, 4 mules, 106 swine.

There are 25 sawmills, most of them small and run by steam.

There are about 15 flour and grist-mills, most of them run by water.

BARTOW COUNTY.

Bartow County was laid out from Cherokee in 1832, and was at that time named Cass, in honor of Hon. Lewis Cass of Michigan. A part was taken from Murray in 1834. During the war between the States the name of the county was changed to Bartow, in honor of General Francis S. Bartow of Savannah, who fell in the first battle of Manassas at the head of a Georgia brigade (7th and 8th regiments). It is bounded by the following counties: Gordon on the north, Cherokee on the east, Cobb, Paulding and Polk on the south, and Floyd on the west. It is traversed by the Etowah river, Stamp, Allatoona, Pumpkin Vine, Euharlee, Raccoon, Oothcalooga, Salacoa and Pettile creeks. There are immense water-powers available, and many are now in use. There is probably no county in the State that presents a greater diversity of geology, soil and vegetation than Bartow. It would be difficult to find one that is more productive of all the staple crops, grasses and fruits. The forest growth presents a great variety of hardwoods and some pine. The mineral wealth is great, consisting of iron, manganese, ochre, bauxite and limestone with active and successful operations in all.

The analysis of the soil of the county shows its great fertility. Thirty-five per cent. is available for plant-food. Of this about one-fifth is soluble silica insuring strength of stalk to all cereals. There is nearly one per cent. of potash; nearly $\frac{1}{4}$ of one per cent. of phosphoric acid; over one per cent. of lime and magnesia; an aggregate of oxide of iron and alumina of more than 11 per cent., which insures moisture by deep plowing and a retentive soil. There is also 10 per cent. of organic matter which renders the soil capable of years of cultivation without fertilization. With fair cultivation the lands will average to the acre as follows: corn, 20 to 35 bushels; wheat, 15 to 20 bushels; oats, 25 to 30 bushels; Irish potatoes, 160 bushels; sweet potatoes, 125 bushels; field-peas, 20 bushels; peavine hay, 2,000 pounds; crab-grass hay, 4,000 pounds; clover hay, 6,000 pounds; fodder, 500 pounds; sorghum syrup, 150 gallons; seed cotton, 750 to 1,200 pounds.

Oothcalooga valley cannot be surpassed in the State on wheat, both as to yield and quality. There are several planters who harvest from 3,000 to 4,000 bushels. The average, according to location and cultivation, is from 25 to 40 bushels to the acre. Corn yields from 25 to 50 bushels to the acre.

Peach-trees are taking every hill-top. During the season of 1900 more than 100,000 trees bore, and fruit growers realized from three to five thousand dollars net. It is estimated that for the year 1901 with a favorable season, a million trees will be bearing and by three years more, two million. Grapes are raised for domestic use, but not yet in sufficient quantities for the market.

According to the United States census of 1900 the cotton ginned in the county of the crop of 1899 was 12,802 bales, all upland.

Considerable attention is paid to dairying, the Jersey cow being the

favorite. According to the United States census of 1890 there were 1,875 sheep with a wool-clip of 3,342 pounds, 7,912 cattle, 3,090 milch-cows, 515 working oxen, 12,474 hogs, 132,062 poultry of all kinds, 1,395 horses, 1,995 mules and 8 donkeys. Among the productions were 952,366 gallons of milk, 319,606 pounds of butter, 40 pounds of cheese, 26,936 pounds of honey, and 191,533 dozens of eggs.

Bartow county enjoys the best of transportation facilities through the Western and Atlantic, the Rome and Kingston and the East and West Railroads. On the Western and Atlantic is the thriving city of Cartersville, which is the terminus of the East and West Railroad, which runs in a southwesterly direction into the State of Alabama. The Cartersville militia district, which includes the city, contains 6,070 inhabitants, of whom 3,135 live in the city, which possesses the conveniences of larger places, such as gas and electric lights, water-works, an ice factory, two banks with an aggregate capital of \$75,000, and a fine system of public schools. Cartersville has a wagon, carriage and buggy factory, a flour-mill, a tannery, and in its vicinity a stave and barrel factory. The Pittsburgh and Georgia Mining Company for the manufacture of pig-iron and steel has been lately organized. The Clifford Stone Company is another new enterprise with a capital of \$30,000.

Around Cartersville are fine cotton, corn and wheat lands. In close proximity there are beds of iron ore and manganese. Methodists, Baptists, Presbyterians and Episcopalians have flourishing churches in Cartersville. Kingston, whence a branch railroad runs to Rome in Floyd county, is a town of 512 inhabitants, while the whole Kingston district has 1,664 people.

Adairsville, also on the Western and Atlantic Railroad, has a bank, a crate factory and the Veach Flouring-mill, one of the largest in Georgia, and in close proximity rich veins of iron ore. The Adairsville district contains 2,245 inhabitants, 616 of whom live in the town.

At Emerson, on the same railroad is a factory for the manufacture of hydraulic cement, a mill for the production of guano filler known as the Southern Company's plaster works, and a large ochre dying establishment. The cement works have an output of 200 barrels a day and the Southern Company's Plaster Works turn out 10,000 tons per annum. Near by Emerson are quantities of iron ore. At Cassville, which was once the county town, there is a flourishing tannery, and at Allatoona is a gold stamping mill. There are twenty-six flour and grist-mills in Bartow county, three of which are run by steam. There are five saw or lumber mills.

Gold, iron, bauxite, limestone, manganese, ochre, graphite and sandstone are more or less extensively mined in Bartow county. From one of the mines about 1,200 tons of iron were shipped last year.

In every community throughout the county are churches of one or more of the leading Christian denominations.

In the 57 schools for whites there is an average daily attendance of

DR. W. H. FELTON'S ORE BANK NEAR CARTERSVILLE, GA.



1,700 pupils, and in the 18 for negroes an average daily attendance of 421. In 1900 the school fund of Bartow county was \$13,977.09.

The land area of Bartow county is 485 square miles, or 310,400 acres.

The population, according to the United State census of 1900 was 20,823.

The following items are taken from the Comptroller-General's report for 1900: acres of improved land, 267,923; of wild lands, 25,903; average value of improved land per acre, \$6.55; of wild land, 83 cents; value of city or town property, \$617,430; shares in bank, \$82,000; sinking-fund or surplus, \$15,400; building and loan associations, \$2,000; money and solvent debts, \$386,354; value of merchandise, \$129,920; stocks and bonds, \$8,490; cotton manufactories, \$38,697; capital invested in mining, \$600; value of household and kitchen furniture, \$163,892; value of farm and other animals, \$271,202; plantation and mechanical tools, \$81,871; watches, jewelry, etc., \$15,297; value of all other property, \$80,044; real estate, \$2,394,805; personal estate, \$1,296,494; aggregate value of whole property \$3,481,605.

Property returned by colored taxpayers: number of acres of land, 5,475; value of land, \$19,437; city or town property, \$29,320; money and solvent debts, \$1,588; merchandise, \$750; household and kitchen furniture, \$8,492; watches, jewelry, etc., \$291; farm and other animals, \$13,852; plantation and mechanical tools, \$2,330; value of all other property, \$538; average value of whole property, \$76,843.

Population of Bartow county by sex and color, according to the census of 1900: white males, 7,305; white females, 7,330; total white, 14,635; colored males, 3,092; colored females, 3,096; total colored, 6,188.

Population of Cartersville by sex and color: white males, 820; white females, 860; total white, 1,680; colored males, 651; colored females, 804; total colored, 1,455.

Total population of Cartersville, 3,135.

Domestic animals in Bartow county, kept in barns and inclosures, not on farms or ranges, June 1, 1900: 50 calves, 21 steers, 215 dairy cows, 234 horses, 44 mules, 7 asses, 397 swine, 1 goat.

There are in the county 2 woolen-mills, 26 flour and grist-mills, 5 sawmills, a cement factory, a mill for the production of guano filler, 1 gold stamping mill, one large tannery, one ochre drying establishment, one ice factory, one water-works plant and one electric light plant.

A more complete statement of the industries of the county will be given when complete returns of the United States census for 1900 have come in.

BERRIEN COUNTY.

Berrien County, in South Georgia, and one of the most progressive in the wire-grass section, was named in honor of John McPherson Berrien, who for many years represented Georgia in the United States Senate. It is bounded by the following counties: Irwin on the north, Coffee and

Clinch on the east, Lowndes on the south, Worth and Colquitt on the west. It is watered by the Allapaha, Withlacoochee and Little rivers, and Cat, Allapacoochee and other creeks. It is traversed by the following railroads: Brunswick and Western of the Plant System; Georgia Southern and Florida; Tifton and Northeastern; Tifton, Thomasville and Gulf; and the Sparks, Moultrie and Gulf. The first four of these cross each other at Tifton in the northwest corner of the county. This is the most important town of the county, thriving and rapidly increasing in population, which by the census of 1900 was 1,384 in the corporate limits and including the whole district, 3,145. Here are large saw-mills, a canning establishment, foundry and machine works. Near the town are several large vineyards, whose grapes are unsurpassed in flavor. The Delaware grape grows to perfection, and matures earlier than in any other locality where it is at this time (1901) cultivated.

Peach orchards are very successful, the fruit enjoying great exemption from injury by frosts.

The forest growth of the county is the long-leaf pine, the immense forests of which are furnishing great quantities of naval stores and timber. As the forest disappears, a fine agricultural and horticultural interest is being built up. All through the county the wire-grass grows in profusion, affording splendid pasturage, on which sheep and cattle can be fed at very little expense.

The face of the county is generally level. The soil is gray and sandy in many parts, but in others is rich loamy and dark with a good clay subsoil. The lands will yield to the acre according to location and cultivation, corn from 10 to 20 bushels; oats, 10 to 20 bushels; Irish potatoes, from 50 to 75 bushels; sweet potatoes, 100 to 200 bushels; field peas, 10 to 15 bushels; ground-peas, 20 to 35 bushels; seed cotton (upland), 750 pounds and sea-island cotton, 500 pounds; hay from native grasses, 2,000 pounds.

According to the United States census of 1900 the cotton ginned in the county of the crop of 1899 was 6,086 bales, of which 1,142 were upland and 4,944 sea-island cotton.

According to the United States census of 1890 there were 13,699 sheep with a wool-clip of 28,161 pounds, 15,323 cattle, 3,928 milch-cows, 347 working oxen, 21,323 hogs, 50,191 poultry of all kinds, 824 horses, 696 mules and 3 asses. Among the productions were 213,943 gallons of milk, 20,192 pounds of butter, 16,564 pounds of honey and 63,215 dozens of eggs. Fifty-three schools for whites have an average attendance of 1,717 pupils, and 17 schools for colored have an average attendance of 543.

According to the report of the State School Commissioner rendered in 1900, the public school fund of Berrien county was \$10,688.24.

Nashville, connected with the Georgia Southern and Florida Railroad by the Nashville and Sparks, a short road $11\frac{1}{2}$ miles long, is the county seat. The district of the same name has 1,821 inhabitants, of whom 293 live in the town.

Sparks, Adel and Cecil are towns on the Georgia Southern and Flor-

ida Railway. The population of each is as follows: Sparks, 683 in the corporate limits and in the entire district 2,170; Adel, 721 in the corporate limits, and in the entire district 1,799; Cecil, 394 in the corporate limits, and in the entire district, 1,178.

The town of Allapaha, on the Brunswick and Western Railroad of the Plant System, has in the corporate limits a population of 429, and in its entire district 1,986.

Thus we have in Berrien county five good towns, the largest of which, Tifton, described in the beginning of this sketch, did not appear on the census report of 1890, but in the last ten years has shown a rapid growth.

Near Lenox on the Georgia Southern and Florida Railroad is a large brickyard.

At Sparks a company has been organized for manufacturing brick and building materials, and for operating gins and planing-mills.

According to the United States census of 1900 the population of Berrien county was 19,440, a gain of 8,746 since 1890. The area of the county is 810 square miles, or 518,400 acres.

The following items are taken from the Comptroller-General's report for 1900: acres of improved land, 481,174; of wild land, 18,998; average value per acre of improved land, \$2.11; of wild land, \$1.00; city or town property, \$420,250; shares in bank, \$23,150; money and solvent debts, \$379,544; value of merchandise, \$183,388; stocks and bonds, \$3,430; cotton manufactories, \$15,938; iron works, \$50.00; capital invested in mining, \$650.00; value of household and kitchen furniture, \$185,653; value of farm and other animals, \$339,397; plantation and mechanical tools, \$63,013; watches, jewelry, etc., \$11,549; value of all other property, \$284,635; real estate, \$1,458,659; personal estate, \$1,496,759; aggregate value of whole property, \$2,955,418.

Property returned by colored taxpayers: number of acres of land, 4,531; value of land, \$10,233; city or town property, \$10,522; money and solvent debts, \$161.00; merchandise, \$225.00; household and kitchen furniture, \$11,646; watches, jewelry, etc., \$377.00; farm and other animals, \$9,578; plantation and mechanical tools, \$2,007; value of all other property, \$1,839; aggregate value of whole property, \$46,618.

The tax returns for 1901 show an increase of all property in the county amounting to \$307,781.

Population of Berrien county by sex and color, according to the census of 1900: white males, 6,908; white females, 6,586; total white, 13,494; colored males, 3,248; colored females, 2,698; total colored, 5,946.

Domestic animals in barns and inclosures, not on farms or ranges, in Berrien county, June 1, 1900: 223 calves, 90 steers, 22 bulls, 298 dairy cows, 187 horses, 121 mules, 400 sheep, 829 swine, 8 goats.

A partial list of the Industries of Berrien county: sawmills and turpentine distilleries (the exact number of neither being accurately ascertained), one woolen-mill, two large brickyards, several gins, ten flour and grist mills operated by water (the number by steam not ascertained), a canning establishment and foundry and machine works.

BIBB COUNTY.

Bibb County was organized in 1822, being set off from Houston county, and was named in honor of Dr. Wm. W. Bibb. A part of Twiggs county was added to it in 1833 and a part of Jones in 1834. It is bounded by the following counties: Jones and Monroe on the north and northwest, Jones and Twiggs on the east, Houston on the south and Crawford on the west and southwest. It is watered by the Ocmulgee river and by Tobesofkee, Echeconnee, Rock, Savage, Beaver Dam and Walnut creeks. The Ocmulgee river has fine water-powers, those at Park Shoals being estimated as 4,000 horse-powers, while the total unutilized powers near Macon are 11,070 horse-powers. This river is navigable to Macon for light draught steamboats.

The red clay soil of the northern part of the county belongs to the metamorphic and the gray, sandy land of the southern section to the tertiary formation. A ridge of sand hills runs diagonally through the county from northeast to southwest. The lands along the Ocmulgee river are especially productive. Including all kinds, the best and poorest, the average yield to the acre of the various crops is: seed cotton, 600 to 800 pounds; corn, 12 bushels; wheat, 15 bushels; oats, 25 bushels; barley, 40 bushels; rye, 13 bushels; crab-grass hay, 2,000 to 3,000 pounds; sugar-cane syrup, 100 to 300 gallons; field peas, 10 bushels; ground-peas, 25 bushels; sweet and Irish potatoes, 100 to 200 bushels. Bermuda grass and clover do well in the northern part of the county. On some of the lands 1,500 pounds of seed cotton are raised to the acre, and in other sections from 900 to 1,200 pounds are easily produced. The river bottom lands readily yield 60 bushels of corn to the acre. On some of these "bottom" lands 7,000 pounds of Bermuda hay and 8,000 of German millet have been cut to the acre.

The finest peaches, plums and pears can be raised in this county.

All the varieties of vegetables do well, and the truck sold in the county averages yearly between \$35,000 and \$40,000. The county raises 5,000 bushels of Irish potatoes, 66,000 bushels of sweet potatoes, and 1,000 pounds of upland rice.

There are 32,000 peach-trees, 4,600 apple-trees and of plum and pear-trees about 2,000 each.

There are 25 dairy farms well stocked with Jerseys and doing a thriving business.

About 20 per cent. of fertilizers used is produced on the farms. Many farmers, especially those who have dairies, have silo pits and use ensilage profitably. Bermuda grass furnishes good summer pasturage, while clover, Texas blue-grass, barley, rye, oats and wheat are used for winter pasturage.

More interest than formerly is being taken in the improvement of beef cattle. The timber products are small, consisting mostly of oak, hickory, cherry, walnut, etc., in the northern part. A little yellow pine is still left. The principal game of Bibb county is quail and doves.



WHITE PLYMOUTH ROCK COCK

100% 100% 100%
100% 100% 100%

The Ocmulgee river and the numerous creeks furnish a considerable quantity of fish.

Among the minerals are pottery clay (in abundance), some ochre, granite and limestone. There are two granite quarries.

According to the United States census of 1900 the county in 1899 produced 6,568 bales of upland cotton.

According to the census of 1890 there were 343 sheep, with a wool-clip of 834 pounds, 2,683 cattle, 1,137 milch-cows, 57 working oxen, 6,024 hogs, 27,124 poultry of all kinds, 482 horses and 1,324 mules. These statistics do not include live stock in the city of Macon.

Among the farm products were 253,507 gallons of milk, 48,042 pounds of butter, 5,105 pounds of honey, and 41,192 dozens of eggs.

Macon, the county seat, named for Honorable Nathaniel Macon, is appropriately called the "Central City," for it is very near, if not in the exact geographical center of Georgia. In 1806 in what is now East Macon, was established an Indian trading post and Fort Hawkins was erected at this western outpost of civilization. Seventeen years later (1823) a town had grown up, most of it on the west of the Ocmulgee, which was incorporated as the town of Macon. The next year the first Macon academy was built. Until the coming of the railroad Macon's steamboat business was considerable. After the city became a railroad center, steamboat navigation ceased, but in the last few years has been resumed.

Macon is now a beautiful city with well-paved streets, lighted by electricity, handsome public buildings, elegant private residences, pretty parks, a first-class system of water-works, an up-to-date electric plant system, two distinct lines of electric railway with tracks permeating every section of the city and its suburbs. The population in the corporate limits, according to the United State census of 1900, is 23,272, in the suburban district of Vineville, 7,787, and of East Macon, outside of the corporate limits, 5,078, making a total population of 36,137.

In the city and suburbs are 48 manufacturing establishments in active operation, having an aggregate capital of \$5,000,000, employing 4,500 operatives, paying out annually in wages between \$700,000 and \$800,000 with an annual output of ten or eleven million dollars. Among these leading manufacturing establishments are: five cotton-mills for spinning yarns; three knitting-mills, one for making stockings and socks and two for making underwear; three iron foundries, for iron castings of every description; brass and bronze machinery, repairing of engines and machinery; three cotton compresses; three establishments for making cornices; three cotton-gin manufactories; six cotton press manufactories; two large cotton-oil companies, one of them having a capital of \$500,000, employing 400 people with a weekly pay-roll of \$1,000 and an annual output of between \$2,000,000 and \$3,000,000; the other employing 100 hands with a weekly pay-roll of \$700; a large fertilizer factory with a capital of \$145,000, a weekly pay-roll of about \$500, and an output worth \$200,000. There are also large sash, door and blind factories, a cracker factory and a large and successful

ice plant. There is also a barrel factory, one for making pants and one for harness.

Counting every establishment engaged in any kind of manufacturing there are 182 manufactories, with an annual output worth \$6,485,767. The Rutland Manufacturing Company operates a grist-mill, gin and stave factory.

Macon's eight banks have an aggregate capital, surplus and undivided profits of \$2,063,500.

Among her commercial houses are some of the most extensive in Georgia, reaching out for the trade of a very large section of the State.

The fire department is unsurpassed in efficiency.

The very best educational facilities are afforded by a splendid system of public schools for city and county, and by private schools and colleges. The public schools number 31 for whites and 18 for negroes, with an average attendance of 3,296 white pupils and 2,200 colored. Mercer University for boys, Wesleyan Female College, the oldest college for ladies in the United States, and probably in the world, are first-class institutions. St. Stanislaus (formerly called Pio Nono), is a Roman Catholic college for priests, and the Mount de Sales Academy is a school for girls under the auspices of the Roman Catholic Church. There is also a Normal school for ladies at the Alexander school building. The Ballard Normal School is for colored pupils.

The Academy for the Blind is a State institution with two departments, one for whites and one for colored, under the same management and superintendence, but located on separate lots in sections of the city remote from each other.

In Macon is the Appleton Home, an orphan house under the auspices of the Episcopal Church, and in Vineville and vicinity are two similar institutions, the Orphan Home of the South Georgia Conference of the Methodist Episcopal Church, and Mumford's Industrial Home.

Other charitable institutions are the City Hospital, on Pine Street, the Julia Parkman Jones Home for indigent ladies, under the auspices of the Episcopal Church, the Roff Home, with hospitals attached for the poor of Bibb county, The Home for the Friendless, and the Door of Hope, a place of refuge for fallen women who seek to be restored to a life of purity.

Through the Central of Georgia Railroad Macon has connection with Atlanta on the north and with Savannah and ocean transportation on the south; through the Southern system with Brunswick and the ocean on the south and with Atlanta and the cities of the north and west. The southwestern branch of the Central of Georgia system gives direct communication with Columbus, Americus, Albany, and all southwestern Georgia. The Macon and Birmingham connecting with lines to the west gives a direct route to Montgomery and New Orleans. The Georgia Southern and Florida, passing through some of the richest sections of the State, connects Macon with Tifton, Valdosta and the chief cities of Florida. The Macon and Northern, another branch of the Central of Georgia system, connects it with Athens; a branch of the Georgia

Railroad connects with Augusta, while the Macon and Dublin and its connecting roads gives still another route to Savannah and the ocean.

The area of Bibb county is 254 square miles or 162,560 acres. By the United States census of 1900 the population is 50,473, an increase of 8,103 over that of 1890. According to the report of the Commissioner of Education the school fund is \$30,369.34. By the report of the Comptroller-General for 1900 there were returned for taxation as follows: acres of improved land, 151,093; acres of wild land, 428; average value per acre of improved land, \$20.73; of wild land, \$1.40; money invested in cotton factories, \$1,321,725; city and town property, \$6,889,190; money and solvent debts, \$834,433; merchandise, \$1,162,890; gas and electric lights, \$566,652; building and loan, \$105,000; household furniture, \$652,335; value of farm and other animals, \$189,915; plantation and mechanical tools, \$69,480; watches, jewelry, etc., \$76,810; stocks and bonds, \$149,871; shipping and tonnage, \$2,505; real estate, \$10,025,025; personal estate, \$6,402,661; aggregate value of property, \$16,427,686.

Property returned by colored taxpayers: number of acres of land, 4,084 valued at \$387,345; city property, \$214,070; money, etc., \$2,640; merchandise, \$97,253; household furniture, \$41,080; farm and other animals, \$25,290; plantation and mechanical tools, \$3,045; watches, jewelry, etc., \$215.00; aggregate value of property, \$683,990.

The tax returns for 1901 show a total increase over 1900 of \$339,764.

LIST OF COTTON-MILLS OF BIBB COUNTY.

	Capital.	Spindles.
Bibb Mill No. 1	\$1,705,000	10,000
Bibb Mill No. 2.		
Manchester Manufacturing Co. ...	\$ 100,000	10,000
Payne Cotton-Mills	50,000	6,328
Willingham Cotton-Mills	100,000	8,200
All these mills manufacture yarns, warps and twines.		

KNITTING MILLS OF BIBB COUNTY.

Macon Knitting Company	\$200,000	350
Schofield Manufacturing Company ...	35,000	26

The Macon Knitting Company manufactures seamless cotton hosiery, while the Schofield Manufacturing Company makes men's ribbed underwear. The Manchester Manufacturing Company also makes hosiery.

The McCaw Manufacturing Company, with a capital of \$500,000, makes cotton seed oil soap, and several by-products from the manufacture of the oil, among which is nitroglycerine.

The Central Ice Company has the largest ice plant and cold storage ware-houses south of Cincinnati.

Population of Bibb county by sex and color, according to the census of 1900: white males, 11,373; white females, 11,705; total white,

23,078; colored males, 12,003; colored females, 14,952; total colored, 27,895.

Population of Macon by sex and color: white males, 5,771; white females, 5,940; total white, 11,711; colored males, 4,886; colored females, 6,675; total colored, 11,561.

Total population in the corporate limits of Macon, 23,272.

Domestic animals of Bibb county, kept in barns and inclosures, not on farms or ranges, June 1, 1900: 111 calves, 15 steers, 4 bulls, 679 dairy cows, 1,105 horses, 301 mules, 5 donkeys, 2 sheep, 1,282 swine, 38 goats.

There are five cotton-mills, 3 iron foundries, 3 cotton compresses, 3 cornice making establishments, 3 cotton-gin manufactories, 6 cotton press manufactories, 2 large cotton-oil companies, 1 large fertilizer factory, 1 large candy and cracker factory, 1 large ice plant, 1 barrel factory, 1 harness factory, 1 pants factory, 3 large lumber mills, including sash, door and blind factories, besides 4 flour and grist-mills on the Ocmulgee and tributaries.

BROOKS COUNTY.

Brooks County, named in honor of Preston S. Brooks of South Carolina, was laid off from Thomas and Lowndes in 1858. It is bounded by the following counties: Colquitt on the north, Lowndes on the east, and Thomas on the west. It is bounded on the south by the State of Florida. Little river runs along the east and falls into the Withlacoochee river, which separates it from Lowndes to the Florida line. This river is a branch of the Suwannee of Florida. Ocopilco creek, passing north to south through the center of the county falls into Withlacoochee river about twelve miles from the Florida line. Piscola creek, flowing through the western part of the county, empties into the Ocala river of Florida.

Quitman, the county seat, named for General John A. Quitman of Mississippi, a gallant soldier of the Mexican war, is located on the Savannah, Florida and Western Railroad, the main line of the great Plant System. It is a thriving, progressive town, the market for a prosperous farming country, with two banks having an aggregate capital of \$175,000, an ice factory, a water-works system, an electric light plant, good schools and churches and an intelligent, moral and industrious population of 2,281 people in the town and 5,286 in the entire district. There is at Quitman a cotton-mill with a capital of \$75,000. The court-house is valued at \$30,000 and a jail at \$10,000. The county enjoys excellent facilities for travel and transportation through three railroads; the Savannah, Florida and Western, the Georgia Northern completed from near Boston to Carlisle, and the South Georgia from Quitman to Heartpine. The rivers and creeks afford an abundant supply of fish. The pine forests afford the best lumber for building purposes and abundance of rosin and turpentine. On account of the mild climate and fine grazing, cattle, hogs and sheep especially can be raised at very little

cost. The face of the country is level. The soil is in some parts sandy, with red clay subsoil, and in some sections consists of hummock lands. Each of these is productive and gives abundant crops of cotton, long-and short-staple, rice, corn, wheat, oats, potatoes and sugar-cane. Superior oranges, figs and melons are raised.

The average yield to the acre of the various crops is: seed cotton, 500 to 800 pounds of upland, and about 350 pounds of sea-island cotton; corn, 10 to 20 bushels; upland rice, 15 to 20 bushels; oats, 10 to 15 bushels; rye, 8 to 10 bushels; sweet potatoes, 100 bushels; sugar-cane, 300 to 600 gallons of syrup; field-peas, 10 to 15 bushels; ground-peas, 15 to 30 bushels. Careful and scientific cultivation will produce still better yields. Crab-grass and peavine hay do well.

According to the United States census of 1900 there were ginned in this county 8,731 bales of cotton, of which 6,396 were upland and 2,335 sea-island cotton. The receipts of the entire county for 1900 were 11,000 bales, of which Quitman received 9,500.

According to the United States census of 1890 there were 1,946 sheep with a wool-clip of 3,488 pounds, 11,319 cattle, 3,072 milch-cows, 257 working oxen, 22,766 hogs, 55,952 poultry of all kinds, 956 horses and 1,325 mules.

Among the productions of the county there were 284,937 gallons of milk, 52,413 pounds of butter, 6,084 pounds of honey and 108,597 dozens of eggs.

The lumber trade is large with an annual output of 10,000,000 superficial feet, valued at \$10.00 a thousand feet. There are 10 turpentine distilleries, with outputs valued at \$10,000 each. There are also 12 saw-mills and 40 grist mills.

Brooks is a healthful county, and during the winter months many invalids from the North, as well as others, resort thither to breathe the health-bestowing aroma of its piny woods. Artesian wells add to its healthfulness.

Churches of the various Christian denominations abound, exerting their saving influences in every community.

In addition to good private schools, the people are well provided with educational advantages by the public school system of Georgia. The public school fund of Brooks county was stated in the report of the State School Commissioner published in 1900 to be \$12,171.15. In the 40 schools for whites there is an average attendance of 1,139 pupils, and in the 30 for negroes, 1,038. The area of Brooks county is 463 square miles or 296,320 acres.

By the United States census of 1900 the population was 18,606, an increase of 4,627 over that of 1890.

The following items are taken from the Comptroller-General's report for 1900: acres of improved land, 298,159 (too high, if the report of the census bureau at Washington is correct); acres of wild land, 5,655; average value per acre of improved land, \$3.54; of wild land, \$1.97; value of city or town property, \$359,973; merchandise, \$145,783; money and solvent debts, \$261,158; value of shares in bank, \$117,500; stocks and

bonds, \$64,812; cotton manufactories, \$77,900; iron works, \$1,500; household and kitchen furniture, \$145,718; farm and other animals, \$249,420; plantation and mechanical tools, \$57,864; watches, jewelry, etc., \$9,047; value of all other property, \$103,555; real estate, \$1,416,780; personal estate, \$1,295,070; aggregate value of whole property, \$2,711,850.

Property returned by colored taxpayers: number of acres of land, 13,698; value of land, \$54,651; city or town property, \$15,479; money and solvent debts, \$2,071; household and kitchen furniture, \$19,766; farm and other animals, \$37,634; plantation and mechanical tools, \$6,612; value of all other property, \$1,450; aggregate value of whole property, \$137,872.

The tax returns for 1901 show an increase in the value of all property over that of 1900 amounting to \$206,545.

Population of Brooks county by sex and color, according to the census of 1900: white males, 3,794; white females, 3,908; total white, 7,702; colored males, 5,515; colored females, 5,389; total colored, 10,904.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 99 calves, 28 steers, 3 bulls, 152 dairy cows, 130 horses, 35 mules, 12 donkeys, 435 swine, 44 goats.

Partial list of manufactories: 40 flour and grist-mills (about ten operated by water), 12 sawmills, 10 turpentine distilleries, one cotton-mill and one woolen-mill.

BRYAN COUNTY.

Bryan County was laid out in 1793, and named for Jonathan Bryan, who came to Georgia in 1752, and was three years later commissioned by the king judge of the general court, and in addition appointed one of the royal counselors of the colony. During the Revolution he heartily espoused the cause of American independence.

Bryan is bounded as follows: northwest by Bulloch county, northeast by Effingham and Chatham, east and southeast by the Atlantic Ocean, south and southwest by Liberty and Tattnall, and west by Tattnall.

The Ogeechee river runs along its northeastern border and turning eastward empties into Ossabaw Sound. The Cannouchee river runs along its western and southwestern border, and then flows easterly across the county into the Ogeechee river. Ossabaw Island is separated from it on the east by a navigable inlet. The lands along the rivers are especially adapted to rice and are very productive. Cotton, both long- and short staple, does well. The quantity of upland adapted to corn and cotton is very limited. Truck farmers have a great advantage in their proximity to the Savannah market, where they find a ready sale for their produce.

The streams supply the markets with large quantities of fish. The people of Savannah who like hunting and fishing make the southern part of the county a resort for their favorite sport.

The Georgia and Alabama Railroad, which is one of the main lines

of the Seaboard Air Line system, with a road from Cuyler, one of its stations, to Dover on the Central, the Savannah, Florida and Western of the Plant System, and the Florida, Central and Peninsular, give to the county the best of facilities for travel and transportation.

There are no large towns in Bryan county. Clyde, near the Cannouchee river, is the county seat. The usual Christian denominations have churches in every community, Methodists and Baptists predominating.

The average yield to the acre of the various crops is: seed cotton, 700 pounds of upland and 350 pounds of sea-island; corn, 10 to 15 bushels; sweet and Irish potatoes, 200 bushels; field-peas, 12 to 15 bushels; ground-peas, 25 to 75 bushels; sugar-cane syrup, 200 gallons; rice 12 to 15 bushels.

According to the United States census of 1900 the cotton ginned in the county for the season of 1899-1900 was 479 bales, of which 227 were upland and 252 sea-island.

According to the United States census of 1890 there were 3,685 sheep with a wool-clip of 6,865 pounds, 6,612 cattle, 1,939 milch-cows, 82 working oxen, 7,909 hogs, 22,199 poultry of all kinds, 396 horses, 316 mules and 4 donkeys.

Among the productions were 82,710 gallons of milk, 8,301 pounds of butter, 15,797 pounds of honey and 25,406 dozens of eggs.

The area of Bryan county is 472 square miles or 273,280 acres.

The population by the United States census of 1900 is 6,122, a gain of 602 since 1890.

According to the report of the State School Commissioner the school fund is \$4,669.87. The average daily attendance of pupils is 546 in the 27 schools for whites, and 450 in the 16 for negroes.

By the Comptroller-General's report for 1900 there are in the county 187,518 acres of improved land; 12,196 acres of wild land. By the same returns the following values are reported: city and town property, \$19,993; tonnage, \$65.00; money and solvent debts, \$64,373; merchandise, \$32,600; money invested in cotton factories, \$150.00; household furniture, \$32,417; farm and other animals, \$121,072; plantation and mechanical tools, \$15,657; watches, jewelry, etc., \$3,474; real estate, \$330,025; personal estate, \$325,404; aggregate of property, \$655,429.

By the same report the property returned by colored taxpayers was as follows: 11,691 acres of land, valued at \$15,779; city or town property, \$702.00; money, etc., \$152.00; household and kitchen furniture, \$3,712; farm and other animals, \$10,381; plantation and mechanical tools, \$1,231; value of all other property, \$1,377; aggregate value of whole property, \$33,855.

The tax returns for 1901 show an increase in the value of all property over 1900 amounting to \$40,705.

Population of Bryan county by sex and color, according to the census of 1900: white males, 1,517; white females, 1,452; total white, 2,969; colored males, 1,643; colored females, 1,510; total colored, 3,153.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900; no report.

BULLOCH COUNTY.

Bulloch County was laid out in 1796 and named for Archibald Bulloch, Governor of Georgia from January 20, 1776 to February 22, 1777, and a devoted champion of the liberties of America. This county runs up into a point at the north. It is bounded by the following counties: Screven on the northeast, Screven and Effingham on the east, Bryan on the southeast, Tattnall on the southwest and west, and Emanuel on the west and northwest. The river Ogeechee flows along its northeastern and eastern borders, and the Cannouchee along its western and south-western boundary. Several creeks flowing into these rivers traverse the county. The most important are Belcher's Mill creek, Black creek, Bird's Mill creek, Big Lott's and Little Lott's creeks, Sculls, Meril's, Dry and Hound creeks. There is also near the Ogeechee river a lake about ten miles long. From this and the rivers and creeks abundance of fish are caught. The county is level and is composed of pine-gray uplands and hummock lands. About one-fifth of the soil is sandy and light loam, one-fifth a stiff dark soil, and one half a red clay soil. The hummock lands are very productive, yielding cotton, long-and short-staple, corn, wheat, oats, rye, sugar-cane, rice and potatoes. The climate is healthy and pleasant. Many instances of longevity have been recorded. In the records of the county are the names of several who lived more than a hundred years.

Religion and education are represented by prosperous churches and schools.

The pine and cypress timbers furnish lumber and shingles for the markets. These are cut up by 20 lumber mills in different parts of the county. There is a good business also in rosin and turpentine. There are 15 turpentine distilleries. There are 25 flour and grist-mills. Rice culture on the hummock lands is profitable.

For travel and transportation the people have the advantage of the following railroads: the Savannah and Statesboro, the former Dover and Statesboro and Pineora roads, now a part of the Central of Georgia system, and Foy. The county site is Statesboro at the junction of the Savannah and Statesboro Railroad with the Central. The court-house cost \$20,000 and the academy, \$15,000. There are in this town a bank with a capital of \$50,000 and a blind and sash factory. A company has been organized here to build a cotton factory.

The Statesboro district contains 3,706 inhabitants, of whom 1,197 live in the town. Both the district and town have doubled in population since 1890.

The Methodists, Baptists and Presbyterians predominate, though other Christian sects are represented. The schools belong to the public school system of Georgia, and number 77 for whites and 42 for colored, with an average attendance of 1,877 white and 1,133 colored pupils.

The average yield per acre of the various crops is: seed cotton, 250 to 500 pounds of sea-island and 500 to 850 pounds of upland; corn 10 to 14 bushels; oats, 10 to 20 bushels; Irish and sweet potatoes, 75 to 200

bushels; field-peas, 10 to 12 bushels; ground-peas, 25 bushels; sugar-cane syrup, 400 gallons.

The annual output of lumber is very great, and the average price per thousand feet is from \$8.00 to \$15.00.

According to the United States census of 1900 the cotton ginned in this county for the season of 1899-1900 was 9,792 bales, of which 1,924 were upland and 7,868 sea-island.

According to the United States census of 1890 there were 15,728 sheep, with a wool-clip of 31,135 pounds, 16,325 cattle, 4,543 milch-cows, 141 working oxen, 27,913 hogs, 85,308 poultry of all kinds, 1,460 horses, 1,046 mules and 1 donkey. Among the productions were 261,175 gallons of milk, 39,221 pounds of butter, 19,751 pounds of honey and 97,788 dozens of eggs. The Jersey is constantly growing in favor as a cow for producing milk and butter.

Peaches, pears, plums, grapes, berries and melons yield good profits to their owners. Abundance of good native grasses for hay and pasturage, the wide range and the mild winters enable the farmers to raise sheep and cattle in great numbers at small expense and good profits.

The area of Bulloch county is 980 square miles or 627,200 acres. The population by the United States census of 1900 was 21,377, an increase of 7,665 since 1890.

By the last report of the Commissioner of Education the school fund was \$12,357.60.

The report of the Comptroller-General for 1900 gives: 458,823 acres of improved lands; 53,971 acres of wild lands; average value of improved lands to the acre \$2.35; of wild lands, \$0.93; value of city and town property, \$185,860; shares in bank, \$50,000; money and solvent debts, \$379,478; merchandise, \$145,975; household furniture, \$138,322; farm and other animals, \$353,706; plantation and mechanical tools, \$72,240; watches, jewelry, etc., \$8,302; real estate, \$1,308,375; personal estate, \$1,330,089; aggregate property, \$2,638,460.

Property returned by colored tax-payers: 13,364 acres of land valued at \$28,209; city property, \$2,245; money, \$1,908; household furniture, \$11,878; watches, etc., \$263.00; farm and other animals, \$22,219; plantation and mechanical tools, \$4,039; aggregate property, \$72,512.

The tax returns for 1901 show an increase in the value of all property over 1900, amounting to \$265,013.

Population of Bulloch county by sex and color, according to the census of 1900: white males, 6,395; white females, 5,818; total white, 12,213; colored males, 4,944; colored females, 4,224; total colored, 9,164.

Domestic animals in barns and inclosures not on farms or ranges, June 1, 1900: 79 calves, 24 steers, 4 bulls, 111 dairy cows, 127 horses, 119 mules, 1 donkey, 408 swine and 7 goats.

Partial list of manufactories: 1 sea-island gin factory, 1 sash and blind factory, 25 flour and grist-mills, 20 lumber and sawmills, and 15 turpentine distilleries.

BURKE COUNTY.

Burke County was laid out in 1758 as St. George's Parish. In 1777 it received its present name in honor of Edmund Burke, the great champion of American liberty, a native of Dublin, Ireland, and a member of the British parliament. In 1793 part of it was set off to Screven county, and in 1798 a part to Jefferson. The Savannah river separates it from South Carolina on the east and the Ogeechee from Emanuel county. Richmond county bounds it on the north, Screven on the southeast, Emanuel on the south, and Jefferson on the west. Brier creek traverses the county from northwest to southeast and is noted for the rich lands along its borders. The county is also watered by Beaver Dam, Brushy, Horse, Rock and Buckhead creeks. On Brushy and Brier creeks and at Shell Bluff are beds of marl. Much of the subsoil consists of calcareous marl from many of the springs and in the banks of the streams. At Shell Bluff is found an almost inexhaustible quantity of limestone of the best quality for making lime. Buhrstone is also very abundant in the county. Chalcedony and jasper have been found. The water of the county is impregnated with rotten limestone. This adds to the productiveness of the soil, but detracts from the taste of the water. The introduction of artesian wells is proving a remedy for this. The artesian well at Waynesboro furnishes to that town a large quantity of wholesome, hard water, good not only for drinking, but also for general domestic purposes.

Waynesboro, the county site, on the Central of Georgia Railway, named in honor of General Anthony Wayne of Revolutionary fame, is a thriving town containing 2,030 inhabitants in its corporate limits. It has good schools and churches of the denominations usually found in our Georgia towns, Methodists, Baptists and Presbyterians. The town has a bank with a capital of \$50,000. It has two fertilizer factories and two cottonseed-oil mills.

Burke county has good private schools and enjoys the advantages also of the public school system of Georgia. There are in the whole county 105 schools, 40 for whites and 65 for colored. The average daily attendance, as reported by the State School Commissioner is 789 in the schools for whites, and 2,419 in the schools for negroes. The school fund for 1900 was \$22,063.73.

The Central Railroad on the southern border and running through the county to Augusta and a branch of the Southern running through the northwest corner, give ample convenience for travel and transportation. The proximity of Augusta to the northern part of the county encourages the trucking business, the value of which amounts to nearly \$20,000 per annum. The tributaries of the Ogeechee furnish water-power which has been utilized by nine grist-mills; those of the Savannah operate 8 mills. Long-leaf pine and wire-grass cover a large area; the timber growth of the north and northwest portions of the county is of the different hardwood varieties. The timber products are valued at \$75,-

000; nearly all yellow pine, also some naval stores. There are 10 or 12 steam sawmills and 3 turpentine distilleries.

According to the United States census of 1900 the cotton ginned in the county for the season of 1899-1900 was 46,152 bales, of which 45,977 were upland and 175 sea-island.

According to the United States census of 1890 there were 1,100 sheep with a wool-clip of 3,609 pounds, 8,007 cattle, 2,661 milch-cows, 392 working oxen, 30,248 hogs, 95,732 poultry of all kinds, 1,633 horses, 3,665 mules and 5 donkeys. Among the productions were 438,533 gallons of milk, 70,027 pounds of butter, 600 pounds of cheese, 15,444 pounds of honey and 177,034 dozens of eggs. The yields of the various crops to the acre under ordinary cultivation average about as follows: seed cotton, 800 pounds; corn, 20 bushels; oats, 30; wheat, 15; rye, 15; sugar-cane, 150 gallons of syrup. The grasses are Bermuda, crab and wire-grass.

The pea-vines also furnish hay. The production of hay is 2,500 pounds to the acre. In 1898 the production of Irish potatoes was 998 bushels; of sweet potatoes, 92,366 bushels. Fruit trees in the county: 4,853 apple-trees, 23,890 peach-trees.

The area of Burke county is 1,043 square miles, or 667,520 acres.

The following items are furnished by the report of the Comptroller-General for 1900: acres of improved land, 589,198; average value per acre of improved land, \$2.53; city or town property, \$361,876; value of shares in bank, \$75,000; sinking-fund, \$6,000; money and solvent debts, \$147,396; cotton manufactories, \$11,250; value of merchandise, \$108,410; stocks and bonds, \$3,000; household furniture, \$113,119; farm and other animals, 284,107; plantation and mechanical tools, \$61,303; watches, jewelry, etc., \$11,666; value of all other property, \$59,371; real estate, \$1,853,419; personal estate, \$948,866; aggregate of all property, \$2,802,285.

Property returned by colored taxpayers: number of acres of land 30,543; value, \$77,660; city property, \$21,811; money, etc., \$770; merchandise, \$625; household furniture, \$29,730; watches, jewelry, etc., \$963; farm and other animals, \$90,146; plantation and mechanical tools, \$20,439; all other property, \$6,925; aggregate, \$276,274.

Burke has always been considered one of the finest agricultural counties in the State. The tax returns of 1901 show a gain in the value of all property over 1900 amounting to \$286,036.

Burke jail is noted for a skirmish which took place in 1779, between the British, led by Colonels Brown and McGirth, and the Americans commanded by Colonels Twiggs and Few, in which the Americans were the victors. In this affair Captain Joshua Inman, an American officer, killed three of the British with his own hand.

According to the United States census of 1900, Burke county had a population of 30,165, a gain of 1,664 over that of 1890.

Population of Burke county by sex and color, according to the census of 1900: white males, 2,869; white females, 2,653; total white, 5,522; colored males, 12,147; colored females, 12,496; total colored, 24,643.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 54 calves, 20 steers, 10 bulls, 102 dairy cows, 119 horses, 14 mules, 254 swine and 34 goats.

Partial list of manufactories: 2 cotton oil mills, 2 fertilizer factories, 1 cotton mill, 17 flour and grist-mills, about 12 sawmills, 4 turpentine distilleries.

BUTTS COUNTY.

Butts County was laid off from Monroe and Henry in 1825, and was named in honor of Captain Samuel Butts, who was killed in the battle of Chalibbee (January 27, 1814), where the Georgia brigade of General John Floyd inflicted a severe defeat upon the Indians who, taking advantage of the war with Great Britain, had risen against the whites and had committed many horrible atrocities in Alabama. This county is bounded by the following counties: Newton on the northeast, Jasper on the east, Monroe on the south, Spalding on the west and Henry on the northwest. The Ocmulgee river runs along its northeastern and eastern borders. A considerable stream called the Towaliga flows through the southwestern part of the county. Tussahaw, Yellow Water and Sandy creeks also water the county.

Jackson, the county site, on one of the main trunks of the Southern Railway, has within the last few years grown rapidly in population, in every line of business and in the character of its buildings. There is in Jackson a flouring mill with patent roller process, and turning out the best of flour. It has among its other industries a flourishing cotton-mill, built by Georgia capital. The bank has a capital of \$50,000. The courthouse is new and cost \$30,000. The jail cost \$6,000. The residences bespeak the progressiveness of the town. In fact, throughout the county the residences and all the outbuildings are above the average in appearance and comfort.

Flovilla, a town of 523 inhabitants, on the Southern, is connected by a short railroad with Indian Spring, a noted fashionable summer resort, celebrated for the healing properties of its sulphur water. The springs are situated in the forks of Sandy creek. Here in 1825 was made the treaty between the whites and Indians which led to the murder of the Indian chief, McIntosh, by his own people. The climate is healthy, as is proven by the advanced age attained by many of its inhabitants. Four miles from Flovilla is the Lamar flour-mill with patent roller process. This mill turns out flour of the best grade.

Besides the important points already named, other post-offices are Jenkinsburg, Cork, and Lofton's Store. Other places are Towaliga, Elgin, Stark, Maystown and Worthville. Though there are hills in some sections, the general face of the county is level. The predominant soil is gray, well adapted to cotton, the grasses, and the different grains. The average yield per acre of the various crops is as follows: seed cotton, 600 to 700 pounds; corn, 10 bushels; wheat, 10 bushels; oats, 15 bushels;

field-peas, 10 bushels; sweet and Irish potatoes, 100 to 200 bushels. The best lands yield to the acre 1,500 pounds of seed cotton; 40 bushels of corn and wheat and other crops in like proportion. On an island in the Ocmulgee river there are 40 acres which yield 40 bushels of oats and 60 of corn to the acre without fertilizing.

According to the United States census of 1900 the cotton ginned in Butts county for the season of 1899-1900 was 14,415 bales, all upland.

According to the United States census for 1890 there were 251 sheep with a wool-clip of 381 pounds, 3,025 cattle, 1,308 milch-cows, 78 working oxen, 4,783 hogs, 54,338 poultry of all kinds, 651 horses, 1,225 mules and 3 donkeys. Some of the productions were: 382,962 gallons of milk; 131,483 pounds of butter; 11,979 pounds of honey and 84,935 dozens of eggs.

The products of the county are marketed chiefly at Jackson, the cotton receipts and shipments from which place amount to 13,000 bales annually. The mills at Jackson use 3,500 bales.

Jackson and Pepperton are neighboring towns, the former containing by the census of 1900 a population of 1,487, and the latter 500 people. The district of Jackson, embracing both these towns and the intervening country, contains 3,663 inhabitants. The Indian Spring district includes the towns of Flovilla and McIntosh, the former with 523 inhabitants and the latter with 262. The whole district has 1,517.

The area of Butts county is 179 square miles, or 114,560 acres.

According to the United States census of 1900 the population of Butts county was 12,805, a gain of 2,240 over that of 1890.

Every community is supplied with churches and schools.

The State School Commissioner reported in 1900 a total of 46 schools. The daily average attendance was 960 in 23 schools for whites and 677 in 23 for negroes. The school fund was \$8,314.28.

The following items are taken from the report of the Comptroller-General for 1900: acres of improved land, 113,794; average value per acre, \$5.50; city or town property, \$235,372; shares in bank, \$35,000; money and solvent debts, \$147,089; value of merchandise, \$81,795; cotton manufactories, \$60,940; household and kitchen furniture, \$78,630; farm and other animals, \$99,772; plantation and mechanical tools, \$34,468; watches, jewelry, etc., \$5,151; real estate, \$832,691; personal estate, \$616,371; value of all other property, \$33,854; aggregate of whole property, \$1,446,062.

Property returned by colored taxpayers: number of acres of land, 1,204; value of land, \$8,688; city or town property, \$7,495; watches, jewelry, etc., \$145.00; household and kitchen furniture, \$8,508; farm and other animals, \$13,044; plantation and mechanical tools, \$3,251; value of all other property, \$481.00; aggregate value of whole property, \$45,441.

The tax returns for 1901 show an increase in the value of all property over 1900 amounting to \$143,537.

Population of Butts county by sex and color, according to the census

of 1900: white males, 2,937; white females, 3,061; total white, 5,998; colored males, 3,251; colored females, 3,556; total colored, 6,807.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 2 calves, 53 dairy cows, 92 horses, 18 mules, 19 swine, 7 goats.

Partial list of manufactures: 4 flour and grist-mills, and 1 sawmill, operated by water, 2 large flour mills with patent roller process, 1 cotton mill.

CALHOUN COUNTY.

Calhoun County was formed out of the northern part of Early in 1854, and was named for John C. Calhoun, the celebrated South Carolina statesman. The counties which bound it are: Randolph and Terrell on the north, Dougherty on the east, Baker and Early on the south, Clay and Early on the west. Morgan, a small town, remote from any railroad, is the county site. A branch of the Central Railroad runs entirely across the southern part of the county. Ichaway-nochaway creek is the largest stream in the county. It runs centrally through it, being formed by two streams, one coming from the northwest, the other from the northeast. Along its eastern border is Chickasawhatchee creek. These streams furnish abundance of fish. Wild turkeys are the principal game.

The lands are generally level, having a gray soil, best adapted to cotton and corn. Out of 187,568 acres in the county, about 95,000 are under cultivation. Of those cultivated 60,000 are upland, 30,000 lowland; 5,000 bottom land. The best lands average from \$5 to \$6 an acre, the wild lands from \$1.28 to \$3.00 to the acre. The average yield to the acre for the several crops is: for cotton, 600 pounds; corn, 10 bushels; wheat and oats, 8 bushels each; rye, 6 bushels; sugar-cane, 150 to 350 gallons of syrup; field-peas, 8 bushels; ground-peas, 12 bushels. Of vegetables only enough are raised for home consumption. A fine hay is cut from crowfoot-grass. Bermuda grass also gives excellent pasturage. The range for cattle, sheep and hogs is fairly good, and enables the farmers to raise their own supply of meat at small cost.

According to the United States census of 1900 the cotton ginned in this county for the season of 1899-1900 was 9,472 bales (upland).

According to the United States census of 1890 there were 248 sheep with a wool-clip of 587 pounds, 4,154 cattle, 1,486 milch-cows, 178 working oxen, 10,233 hogs, 26,251 of all kinds of poultry, 546 horses, 1,412 mules, and 1 donkey.

Among the productions of the county there were 184,604 gallons of milk, 24,644 pounds of butter, 109 pounds of cheese, 6,914 pounds of honey and 52,489 dozens of eggs.

Two canneries at Morgan put up during the last season about 2,000 crates of fruit. Arlington and Leary on the railroad are growing well.

Of the original forests there are still standing in the county: of pine 50,000 acres, of oak and gum 20,000 acres, and of swamp timber 20,000 acres. There are eight sawmills in the county. The annual output of

lumber is about 1,000,000 superficial feet per annum. There are two turpentine distilleries, one at Leary and one at Arlington. There is a good water-power at Cordray's Mill. This is a flour and grist-mill and is valued at \$2,500. There is a cottonseed-oil mill at Arlington, valued at \$20,000. From the entire county there are shipped annually about 8,000 bales of cotton.

Arlington, the largest town, is at the junction of the Georgia Pine Railway, with a branch of the Central, and lies partly in Calhoun and partly in Early county. Of its 755 inhabitants 655 are citizens of Calhoun county. The militia district in which it is situated has a population of 1,990.

Leary, on the Central of Georgia Railway, has inside the corporation 396 inhabitants and in the whole district 1,962.

Morgan, the county site, is about 7 miles north of the Central Railway.

The area of Calhoun county is 276 square miles, or 176,640 acres. Its population, by the United State census of 1900, was 9,274, a gain of 836 in the last decade.

Churches of one or more of the leading Christian denominations are found in every community.

There are 37 school buildings belonging to the public school system of Georgia. The daily average attendance is 421 pupils in the 15 schools for whites and 823 in the 22 schools for negroes. The school fund is \$6,684.94.

The county is supplied in many sections with artesian wells which, with good, pure water have added greatly to its healthfulness.

The Comptroller-General's report for 1900 contains the following items: acres of improved lands 174,275; of wild lands, 1,560; average value per acre of improved land, \$2.66; of wild land, \$1.12; value of city or town property, \$123,248; money and solvent debts, \$61,301; merchandise, \$65,585; cotton manufactories, \$12,125; iron works, \$2,200; value of household and kitchen furniture, \$50,737; farm and other animals, \$108,696; plantation and mechanical tools, \$23,575; watches, jewelry, etc., \$1,866; value of all other property, \$24,675; real estate, \$589,994; personal estate, \$353,183; aggregate value of whole property, \$943,177.

Property returned by colored taxpayers: number of acres of land, 7,242; value of land, \$17,083; city or town property, \$10,250; money and solvent debts, \$423.00; household and kitchen furniture, \$16,780; farm and other animals, \$20,691; plantation and mechanical tools, \$4,237; value of all other property, \$975.00; aggregate value of whole property, \$70,593.

The tax returns for 1901 show a gain in the value of all property over 1900 amounting to \$83,286.

Population of Calhoun county by sex and color, according to the census of 1900: white males, 1,215; white females, 1,184; total white, 2,399; colored males, 3,425; colored females, 3,450; total colored, 6,875.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 59 calves, 16 steers, 4 bulls, 82 dairy cows, 72 horses, 14 mules, 3 donkeys, 310 swine.

CAMDEN COUNTY.

Camden County was formerly embraced in the parishes of St. Thomas and St. Mary's. In 1777 these were formed into a county and named in honor of the Earl of Camden who, in the British parliament, so boldly plead for the liberties of America. Part of it was taken from Wayne in 1805, and a part added to Wayne in 1808. It is bounded on the north by Glynn and Wayne counties, on the east by the Atlantic ocean, on the south by Florida, from which it is separated by the St. Mary's river, and on the west by Charlton county. The Satilla (formerly called St. Illa) river flows along its western border, then turning to the northeast flows almost centrally across the county and empties through St. Andrew's sound into the Atlantic ocean. The Little Satilla, along its northeastern boundary, also empties into St. Andrew's sound. The county is also watered by several creeks.

St. Mary's, the county seat, is beautifully situated on the river of the same name, in full sight of the ocean, from which it is distant nine miles. Its harbor is accessible to the largest vessels, and St. Mary's enjoys considerable trade. The sawmills, constantly busy, impart to the place an air of thrift. The streets are broad and adorned with shade-trees, among which are orange-trees, laden in their season with golden fruit, and sycamore and wild olive-trees, clad in a foliage of perpetual green. In the winter season the town is thronged with Northern visitors seeking health or pleasure. It is well supplied with churches of the different denominations, Baptist, Methodist, Episcopalian, Presbyterian and Roman Catholics. St. Mary's besides its excellent harbor has easy access by the river to the Florida Central and Peninsular Railroad, which traverses the county from north to south. The St. Mary's district has 1,291 inhabitants, of whom 529 live in the town.

In Camden county are 26 white and 22 colored schools with an average attendance of 219 white and 372 colored pupils.

The soils of Camden county are of different kinds; gray, yellow and dark, and some blue clay bottom land. Only 50 acres were during the last season planted in cotton, 5,000 acres were planted in corn, none in wheat, 1,000 in barley, 3,000 in rice,, 100 in sugar-cane, 20 in sorghum, 100 in Irish potatoes, 1,000 in sweet potatoes, 1,000 in field-peas, 500 in ground-peas, 200 in chufas and 1,000 in vegetables of every kind. The average yield by the acre was: 600 pounds of seed cotton; 15 bushels of corn; 20 bushels of oats; 30 to 35 bushels of rice; 160 bushels of Irish potatoes; 230 bushels of sweet potatoes; 10 bushels of field-peas; 60 bushels of ground-peas; 170 bushels of chufas. The ribbon-cane averages from 130 to 200 gallons of syrup to the acre, and the sorghum 40 gallons. The rice acreage for 1901 was unusually large.

Though no attention is paid to the making of hay, the soil is well adapted to all the grasses. The wooded lands, carpeted with grass, afford pasturage all the year. Cattle require but little attention, and the cost of raising a yearling calf is nothing. About 75 per cent. of the fertilizers used is produced on the farm. Some improvement has been

made in the breeds of cattle, and more attention than formerly is being paid to the raising of beef cattle. By the census of 1890 there were in the county 407 horses, 49 mules, 2,354 sheep with a wool-clip of 3,972 pounds, 9,668 cattle, 969 being working oxen and 2,397 milch-cows; 17,411 of all kinds of poultry and 6,542 hogs.

Among the farm products were: 84,395 gallons of milk, 8,526 pounds of butter, 21,577 dozens of eggs and 3,656 pounds of honey.

The fish are of all kinds, both salt-water and fresh. There is also an abundance of shrimp, crabs, clams and oysters, though the demand for the last-named by the canning factories has diminished greatly the supply in the oyster-beds. The county abounds in game, such as deer, wild turkeys, quail (or partridge), doves and snipe.

In the gardens all the usual vegetables, and common varieties of berries are raised. Markets are found for them in Fernandina, Jacksonville, Brunswick and New York. Every farm has an orchard in which are raised fruits for home consumption. In addition to peaches, plums, cherries, etc., they produce oranges, lemons, figs, olives, pomegranates and melons. Great quantities of grapes are also raised.

Camden county is well supplied with artesian wells, and has several mineral springs. There are 3 grist-mills and the same number of saw-mills, also 9 turpentine distilleries, and one buggy factory. The navigable rivers, Satilla and St. Mary's, and the railroad give good facilities for travel and transportation, by steamboat and train. The lands along the rivers are noted for their fertility in the production of rice and the long and short staple cotton.

The area of Camden county is 718 square miles or 459,520 acres. Its population by the census of 1900 was 7,669, a gain over 1890 of 1,491. By the State School Commissioner's report of 1900 the school fund was stated to be \$4,864.99.

The report of the Comptroller-General for 1900 gives the following items: acres of improved land, 18,555; of wild land, 298,272; average value of improved land, \$14.02; of wild land, \$0.60; city and town property, \$67,592; money, etc., \$103,319; capital invested in shipping, \$8,351; stocks and bonds, \$12,250; merchandise, \$50,004; cotton factories, \$6,500; household furniture, 543,554; farm and other animals, \$136,681; plantation and mechanical tools, \$14,779, watches, jewelry, etc, \$3,568; value of all other property, \$52,103; real estate, \$506,564; personal estate, \$435,691. Aggregate, \$942,255.

Property returned by colored taxpayers: acres of land, 4,643; value, \$37,589; city property, \$11,457; money, \$128.00; merchandise, \$300.00; household furniture, \$13,172; farm and other animals, \$33,937; plantation and mechanical tools, \$3,568; value of all other property, \$3,138; aggregate property, \$103,495.

The tax returns for 1901 show an increase of \$334.00 in value of all property over 1900.

There are several islands in the county, the most important of which are Jekyl and Cumberland. The latter is eighteen miles long and one half to three miles wide. The Indian name for it was Missoe. This

name was changed when Oglethorpe visited it, at the request of an Indian chief, who had received some kindness from the Duke of Cumberland. Dungeness, formerly the property of General Nathaniel Greene, is on this island. It was on a visit to Mrs. Shaw, daughter of General Greene, that General Henry Lee, the father of Robert E. Lee, and familiarly known as "Light Horse Harry," died, and from this hospitable home his body was borne to its last resting place.

On the 11th of January, 1815, before news of the treaty of peace had reached America, a force of about 1,500 British troops landed on Cumberland Island, where they had quite a sharp skirmish with something less than one hundred Americans.

During this same month twenty-three barges, filled with British soldiers ascended St. Mary's river for the purpose of burning Major Clarke's mills, whom they accused of breaking his parole. A detachment of 28 Americans under command of Captain William Cone, screening themselves behind the palmetto on both sides of the river, made it so hot for the enemy that they retreated. The British reported a loss of over 300 men killed and wounded.

In Camden county lived and died General John Floyd who, at the head of a Georgia brigade, won great distinction as an Indian fighter during the second war with England. He was born of Virginia parentage in Beaufort district, South Carolina, October 3, 1769. About 1791 or 1792 both father and son moved to Georgia and settled in Camden county on the Satilla river. After the close of the second war with England General Floyd represented his county in the State Legislature, and the State in the Federal Congress. He died June 24, 1824.

Among the ratifiers of the Constitution of the United States in the convention which met in Augusta, January 2, 1788, were Henry Osborne, James Seagrove and Jacob Weed of Camden.

On Little Cumberland Island is a light-house sixty feet high, with a revolving light which can be seen at sea a distance of 20 miles.

Population of Camden county by sex and color, according to the census of 1900: white males, 1,299; white females, 1,124; total white, 2,423; colored males, 2,725; colored females, 2,521; total colored, 5,246.

Domestic animals in barns and inclosures, not on farms or ranges June 1, 1900: 61 calves, 83 steers, 3 bulls, 134 dairy cows, 67 horses, 37 mules, 21 sheep, 430 hogs, 9 goats.

CAMPBELL COUNTY.

Campbell County was laid out from Coweta, Carroll, DeKalb (that part now called Fulton) and Fayette in 1828, and a part was added from Cherokee in 1832. It is watered by the Chattahoochee river and the creeks that flow into it and into the Flint. It is bounded by the following counties: on the north by Douglas and Fulton, east by Clayton, south by Fayette and Coweta, west by Carroll, and northwest by Douglas. It was named in honor of Duncan G. Campbell, a distinguished lawyer and

member of the Georgia Legislature, a great advocate of the higher education of females, a commissioner to treat with the Indians in 1823, and one of the signers of the treaty with the Creek nation at Indian Spring in 1825. The original county site was Campbellton, situated upon a commanding eminence on the Chattahoochee river. The present county seat is Fairburn, a prosperous little town on the West Point Railroad about 22 miles from Atlanta. The Methodists, Baptists and Presbyterians predominate throughout the county. The schools belong to the public school system of Georgia and are in a prosperous condition. The 26 for whites have an average attendance of 978 pupils; the 16 for colored have an average attendance of 625.

The soil is varied. On the rivers and creeks it is a black loamy soil, suited for the raising of corn, cotton, wheat and oats. The red and gray lands are productive of peas, potatoes, onions, cabbage, turnips, and many other vegetables.

Within easy reach of the two principal towns, Fairburn and Palmetto, are inexhaustible supplies of granite, some of which is so fine-grained and hard that it takes the highest polish.

The average yield per acre of the various crops is: seed cotton, from 500 to 800 pounds; corn, $12\frac{1}{2}$ bushels; wheat, 10 bushels; oats, 18 bushels; Irish potatoes, 50 to 75 bushels; sweet potatoes, 75 to 150 bushels; hay from native and other grasses, 2,500 to 3,000 pounds. Clover, wherever tried, does well. Of fruits, apples and peaches make especially fine yields. For fall and winter pasturage Bermuda is the great reliance of the farmers. There are some 20 small dairy farms, and the Jersey is the favorite milch-cow. Some of these dairies make fair profits on butter shipped to Atlanta.

There are many market gardens from which cabbages, turnips and watermelons are gathered and sold in Atlanta. There are some cultivated strawberries, but for the most part they grow wild, and like the blackberries, dewberries and cherries, cost the sellers nothing but the picking.

There are about 500 acres devoted to the raising of melons for the market, which bring an average net profit of \$15.00 to the acre. About 1,000 acres are devoted to peaches, and very near the same number to apples.

There are about 20 vineyards containing 250 acres, and the value of grapes sold in the county is about \$500.00.

Campbell county has about 2,500 acres of forest land, mostly pine and oak. The annual output of lumber is about 800,000 superficial feet, at an average price of \$10.00 per thousand feet.

At Palmetto is a cotton factory with a capital of \$100,000, containing 5,500 spindles and 100 looms, using about 3,000 bales of cotton annually, and producing material worth about \$75,000.00. Here also are extensive wood-working and blacksmith shops and a public ginnery. This town has a population of 620 in its corporate limits, and its entire militia district has 1,478 inhabitants.

Fairburn, the county site, has a population of 761, but including the Fairburn district the population is 2,461. Here is a large harness and saddle factory which employs 60 hands, with a weekly pay-roll of

\$450.00, and through its traveling salesmen disposes of its annual product of more than \$150,000 in the States of Virginia, Kentucky, North and South Carolina, Georgia, Florida and Alabama.

Near Fairburn is the Trentham Spring, a lithia water helpful to kidney and nervous troubles.

According to the United States census of 1900, the cotton ginned in the county for the season of 1899-1900 was 9,614 bales, all upland.

According to the United States census of 1890 there were 464 sheep with a wool-clip of 883 pounds, 2,777 cattle, 1,133 milch-cows, 110 working oxen, 3,264 hogs, 58,614 poultry of all kinds, 390 horses, 1,057 mules and 2 donkeys.

Among the productions were 382,048 gallons of milk, 141,835 pounds of butter, 13,039 pounds of honey, and 78,445 dozens of eggs.

The area of Campbell county is 205 square miles or 131,200 acres. The population by the United States census of 1900 is 9,518.

According to the report of the Department of Education the school fund is \$7,501.28.

By the Comptroller-General's report for 1900 the taxable property returned is as follows: acres of improved land, 130,141; average value per acre, \$5.94; city and town property, \$148,989; money and solvent debts, \$213,569; merchandise, \$41,125; stocks and bonds, \$2,050; cotton manufactories, \$25,500; household and kitchen furniture, \$62,076; farm and other animals, \$106,898; plantation and mechanical tools, \$27,337; watches, jewelry, etc., \$4,585; real estate, \$922,469; personal estate, \$526,289; aggregate property, \$1,433,496.

Property returned by colored taxpayers: 2,500 acres of land, valued at \$15,103; city or town property, \$8,759; money, etc., \$15.00; household and kitchen furniture, \$5,388; watches, etc., \$124; farm and other animals, \$8,816; plantation and mechanical tools, \$1,775; aggregate property, \$40,322.

The tax returns for 1901 show an increase of \$47,807 in the value of all property over the reported values of 1900.

Opposite the village of Campbellton on the western bank of the Chattahoochee, in a tuft of trees, on a mound like those so common in Georgia, rest the remains of Anawaqua, an Indian princess, once the proprietor of the land in that neighborhood. This mound is in a meadow, in a bend of the river, near the foot of a hill. Traces of ancient fortifications can be discerned all around the plain, from the river to the hill.

The towns of Fairburn and Palmetto are both situated on the dividing ridge between the Chattahoochee and Flint rivers. Hence the rains falling on the east side of these towns run into the Flint river and those on the west side, into the Chattahoochee.

Population of Campbell county by sex and color, according to the census of 1900: white males, 3,186; white females, 3,164; total white, 6,350; colored males, 1,619; colored females, 1,549; total colored, 3,168.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 57 calves, 9 steers, 1 bull, 97 dairy cows, 36 horses, 7 mules, 21 sheep, 187 swine.

CARROLL COUNTY.

Carroll County was laid off in 1826, a part set off to Campbell in 1828; and portions successively set off to Heard in 1830, 1831 and 1834. It was organized in 1826 and named after Charles Carroll, a signer of the Declaration of Independence from Maryland. It is bounded by the following counties: Paulding and Haralson on the north, Douglas, Campbell and Coweta on the east, Coweta and Heard on the south, and the State of Alabama on the west. A little strip of the northern part of the county is bounded west by Haralson.

Carroll county is watered by the Chattahoochee and Little Tallapoosa rivers and their tributaries, the largest of which are Big Indian and Sweet Water creeks. The soil is varied; rolling red and gray lands with retentive clay subsoil. The lands are very fertile, especially along the Chattahoochee, Little Tallapoosa and the bottoms along the creeks. The average yield per acre of the various crops, taking all the lands, the best and the poorest, is about as follows: corn, 15 and one-third bushels; oats, 10 bushels; wheat, 7 bushels; cotton, 700 or 800 pounds seed cotton; sugar-cane, 20 pounds of sugar, and 122 gallons of syrup; hay, 2,260 pounds. The county also raises about 8,000 bushels of cowpeas, 1,219 bushels of peanuts, 2,800 bushels of Irish potatoes, 66,313 bushels of sweet potatoes, and 3,000 pounds of tobacco. The truck sold is somewhere near \$10,000 worth per annum.

Of fruit trees, about 33,000 are apple and 59,300 peach-trees. Fruits and vegetables do well.

According to the United States census of 1900, the cotton production of the county for 1899 was 28,504 bales, all upland.

In 1890 there were in the county 1,276 horses, 2,407 mules, 11,903 swine, 159,548 of the various kinds of poultry, 9,055 cattle, 3,542 milch-cows, 57 working oxen, 1,897 sheep with a wool-clip of 2,761 pounds. There were produced 1,097,167 gallons of milk. The butter production of the county was 401,138 pounds, the honey, 28,111 pounds, and the eggs, 63,500 dozens.

The timber growth is chiefly oak and hickory; on streams, ash, maple, walnut, poplar and gum. The timber products amount to about \$10,000 per annum.

Ninety-three manufactories have an annual output of \$342,445. Along the Little Tallapoosa and tributaries are 17 mills (flour and grist), and along the tributaries of the Chattahoochee 16 mills. The water is pure freestone. The climate is delightful. Gold, copper, iron, pyrites, mica and asbestos are found, all in workable quantities. The gold of this county is said to be very fine. Near Villa Rica, in the northeastern part of the county on the Southern Railway, there is an extent of country six miles long and one mile wide in which are numerous mines yielding large amounts of gold. Quartz and granite are also found.

There is no more healthful region anywhere. Among other attractions to home seekers are good schools and churches. Baptists, Methodists and Presbyterians are in the lead, the two former being the more numerous.

There are 76 white schools and 16 colored, with an average attendance of 3,425 white and 929 colored pupils.

Carrollton, the county site, a thriving town of near 2,000 inhabitants, has a good trade and is growing in business and population. Here the Chattanooga, Rome and Southern and a branch of the Central Railroad meet. Here is also a flourishing cotton factory with a capital of \$100,000, and a cotton oil-mill. Carroll is one of the most prosperous counties of Georgia. Area is 486 square miles or 311,040 acres. Population in 1900, 26,576; school fund, \$17,903.34. By the Comptroller-General's report for 1900 there are: acres of improved land, 282,181; of wild land, 6,775; average value per acre of improved, \$5.12, and wild, \$1.26; city property, \$378,574; value of shares in bank, \$113,300; gas and electric lights, \$4,000; money, etc., \$333,851; merchandise, \$134,499; cotton manufactories, \$89,000; household furniture, \$140,333; farm and other animals, \$270,555; plantation and mechanical tools, \$71,578; jewelry, \$6,883; value of all other property, \$35,805; real estate, \$1,831,994; personal estate, \$1,214,296. Aggregate property, \$3,046,290.

Property given in by colored taxpayers: 5,127 acres; value, \$19,432; city property, \$5,449; household furniture, \$1,066; farm and other animals, \$8,789; plantation and mechanical tools, \$1,773; value of all other property, \$191.00. Aggregate, \$36,956.

The tax returns for 1901 show an increase of the value of all property over 1900 amounting to \$595,839.

In Carroll county lived General William McIntosh, a half breed of the Muscogee or Creek nation. He commanded a force of friendly Creeks in the war of 1812-1815, and was greatly distinguished in the battles of Autossee, the Horse-Shoe Bend, and later in the Florida campaign. Chiefly through his agency was effected the treaty with the Georgians at Indian Spring on the 12th of February, 1825, by which the Creeks ceded to the whites the balance of the lands owned by them in Georgia. The faction of the Creeks opposed to this treaty came in large force to the house of General McIntosh, set it on fire and shot the general. They also killed the son-in-law of McIntosh, Colonel Samuel Hawkins, and another one of the chiefs, Etommee Tustunnugge, who had signed the treaty. Out of these troubles came the controversy between Georgia and the general government, with regard to the Indian lands, in which Georgia, through the firmness of Governor Troup, maintained successfully her position.

There are several thriving towns in Carroll county. Carrollton, on the Central of Georgia Railway, has a population of 1,998 in its corporate limits, while the whole district has 5,934 inhabitants. A company has recently been organized to put in an electric light plant.

The population of the other towns and their including districts is as follows:

Villa Rica district, 2,535; Villa Rica town, 576; Temple district, 2,795; Temple town, 397; Whitesburg district, 1,156; Whitesburg town, 296; Bowdon district, 1,547; Bowdon town, 397; Roopville district, 1,309; Roopville town, 109.

The population of the whole county, 25,576, shows a gain of 4,275 over that of 1890.

Population of Carroll county by sex and color, according to the census of 1900: white males, 10,825; white females, 10,714; total white, 21,539; colored males, 2,573; colored females, 2,464; total colored, 5,037.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 169 calves, 45 steers, 5 bulls, 291 dairy cows, 207 horses, 57 mules, 24 sheep, 460 swine, 7 goats.

CATOOSA COUNTY.

Catoosa County in the northwestern part of the State was set off from Walker and is bounded as follows: Tennessee on the north, Whitefield county on the east and south, and Walker county on the south and west. The soils are varied; the valley lands being gray and dark; the bottom lands, black; the uplands, gray and gravelly, and red.

Of 96,000 acres in the county, about 24,000 are under cultivation, of which 15,500 are upland, 6,000 valley (or lowland), and 2,500 bottom land. About 66 per cent. is timber land. The uplands average about \$4.00 to the acre; the valley lands, \$10.00; the bottom lands \$20.00. About 1,000 acres are planted in cotton, 6,000 in corn, 3,000 in wheat, 1,000 in oats, 500 in sorghum-cane, 500 in Irish potatoes, 300 in sweet potatoes, 2,000 in field-peas and 5,000 in garden vegetables.

Under ordinary methods of cultivation cotton yields from 500 to 800 pounds of seed cotton to the acre; corn, 20 bushels; wheat, 15 bushels; oats, 25 bushels; field-peas, 15 bushels; Irish potatoes 150 bushels; sweet potatoes, 150 bushels. All vegetables give abundant yields. Timothy Herd-grass and Orchard-grass, clover and German millet, do well and are extensively raised. From 3,000 to 5,000 pounds of hay to the acre is about the average; fodder about 300 pounds. Sorghum-cane yields about 250 gallons of syrup to the acre. From 100 acres, devoted to raising melons for the market, the profit for last season amounted to \$25.00 to the acre. Large quantities of strawberries are raised. Most of the early ones are shipped to Cincinnati, and the later ones to Atlanta. The proximity of Chattanooga, Tennessee, has given rise to a large dairying and trucking business, the value of the latter being about \$15,000. Through the instrumentality of the Trucker's Association, cold storage cars convey vegetables, melons and berries to Cincinnati and other points in the northwest. About 1,200 acres are devoted to peaches, the net value of which is about \$3.00 a crate.

Facilities for travel and transportation are afforded by the Western and Atlantic Railroad, which connects at Chattanooga with lines branching out in every direction.

Many fine deposits of building and other stones are found in this county. The sand and limestones are of superior quality. Large works have been in operation for years at Greysville, converting limestones into carbonate of lime. There is abundance of iron ore in Taylor's Ridge.

In this county is located the noted health resort, famed for its varied waters, the Catoosa Springs, from which the county derives its name.

Ringgold, the county site, on the Western and Atlantic Railroad, carries on a fine commercial business with the farmers of the vicinity.

Much attention is being given of late to the raising of beef cattle and improvement of the breed. The cattle of the county numbered in 1890, 3,410. There were 1,312 milch-cows and 57 working oxen. The summer pasturage lasts about six months, from May to October. For four months cattle must be fed. The chief food is cotton seed meal, hulls and bran, with some rye and hay. It costs about \$1.50 to raise a yearling calf. Other farm animals in the county were in 1890, 644 horses, 722 mules, 1,914 sheep with a wool-clip of 3,385 pounds, 3,871 swine and 500 goats. Good crops and good ranges have improved all stock. The cost of raising a three-year-old mule or horse is \$20. The poultry in 1890 numbered 49,724 of all kinds.

There are in the county 21 donkeys. There is a production of 121,000 pounds of butter, 6,651 pounds of honey, and 64,000 dozens of eggs.

Three-fourths of the acreage of the county is in forests, oaks, hickory, poplar and pine. A great deal of the salable timber has been cut for the mill at Chattanooga.

There are in Catoosa county five flour and grist-mills and six lumber or sawmills, the former operated by water-power and the latter by steam.

Among the products of the county are 466,395 gallons of milk.

The county has good schools, and the Methodists, Baptists, and Presbyterians have churches. There are 24 schools for whites and 4 for negroes, having an average attendance of 695 whites and 91 colored pupils.

The condition of roads is good. There are about 20 miles of macadamized road built by the government.

According to the United States census of 1900 the cotton production of the county for 1899, was 810 bales, all upland.

Ringgold, named for the gallant Marylander, Major Ringgold, who fell mortally wounded at Palo Alto, the first battle of the Mexican war, was the scene of a fierce conflict in November, 1863. As General Bragg was retreating from Missionary Ridge after his disastrous defeat, General Cleburne halted his division at a gap in Taylor's Ridge, and inflicted a decisive repulse upon the pursuing Federal army under Hooker, thus saving the artillery and trains of the Confederates. For this gallant battle of Ringgold, General Cleburne received the thanks of the Confederate Congress.

Area of the county is 171 square miles or 109,440 acres.

Population of Catoosa county in 1900, 5,823; school fund, \$3,858.84.

By the Comptroller-General's report for 1900, there are: acres of improved land, 95,167; of wild land, 3,977; average value per acre of improved land, \$5.55; of wild land, \$1.60; city property, \$45,130; money, etc., \$70,835; merchandise, \$14,165; mining, \$375; household and kitchen furniture, \$36,766; farm and other animals, \$109,918; planta-

tion and mechanical tools, \$27,613; watches, jewelry, etc., \$2,167; value of all other property, \$10,053; real estate, \$578,882; personal estate, \$273,458. Aggregate of all property, \$853,340.

Property returned by colored taxpayers: number of acres of land, 676; value, \$1,780; city or town property, \$1,682; household and kitchen furniture, \$760.00; farm and other animals, \$2,976; plantation and mechanical tools, \$504.00; value of all other property, \$33.00. Aggregate of whole property, \$7,734.

The tax returns of 1901 show a decrease of \$354 in the value of all property within the last year.

The county site is Ringgold, which has a population of 437 in the town and 1,221 in the whole Ringgold district.

Population of Catoosa county by sex and color, according to the census of 1900; white males, 2,767; white females, 2,574; total white, 5,341; colored males, 280; colored females, 202; total colored, 482.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 20 calves, 3 steers, 51 dairy cows, 35 horses, 10 mules, 1 donkey, 143 swine, 31 goats.

CHARLTON COUNTY.

Charlton County was laid off from Camden in 1856 and named for Judge T. U. P. Charlton of Savannah. It is bounded by the following counties: Wayne, Pierce and Ware on the north, Camden on the east, and Ware on the west. The northeastern part of the county runs up between Camden on the east and Pierce on the west. The southeastern part runs down in such a way as to have Florida on three sides of it. For some distance along its eastern border runs the Satilla. The St. Mary's river rising in the southern part of the county runs along the western, southern and eastern sides of that part of it which projects into Florida. Okefinokee Swamp occupies a large part of the county.

On the neck of land between Okefinokee Swamp and the Florida line melons, potatoes, long-staple cotton, sugar-cane and tobacco give good yields. Oranges and figs are plentiful. By far the greater portion of lands in this county are wild lands and are devoted to stock-raising. There is no section of the State better adapted to raising sheep, cattle and hogs at small cost.

Travel and transportation of products are over the Plant System, the Atlantic, Valdosta and Western.

Trader's Hill, about four miles from the Savannah, Florida and Western Railway of the Plant System, and also on the St. Mary's river, is the county site. The lumber business of this town is considerable. The streams supply abundance of fish, and the wild lands afford game of every sort, such as deer, bear, turkey, wood-cock, partridge, snipe, etc.

The people of Charlton do not raise much cotton, as is shown by the statistics of the United States Department of Agriculture.

According to the United States census of 1900 the cotton ginned in

Charlton county for the season of 1899-1900, was 302 bales, all sea-
island.

By the census of 1890 there were 2,983 sheep with a wool-clip of 4,903 pounds, 9,255 cattle, 2,406 milch-cows, 831 working oxen, 7,094 hogs, 12,247 poultry of all kinds, 300 horses, 34 mules and 1 donkey.

Among the farm products were 63,017 gallons of milk, 9,045 pounds of butter, 5,556 pounds of honey, and 14,763 dozens of eggs.

The lumber business occupies the attention of many people in the neighborhood of the great Okefinokee Swamp, where millions of feet of yellow pine and cypress are to be obtained. Large sawmills are in operation near the edge of the Swamp.

This county has 24 schools for white and 4 for colored pupils, with an average attendance of 467 white and 118 colored.

The school fund as stated in the report of the State School Commissioner, rendered in 1900, was \$2,902.95.

The area of Charlton county is 1,063 square miles, or 680,320 acres.

The population by the United States census of 1900 was 3,592, an increase of 257 in the last decade.

The following items are taken from the Comptroller-General's report for 1900: acres of improved land, 146,262; of wild land, 532,528; average value per acre of improved land, \$0.68; of wild land, \$0.14; city or town property, \$4,415; money and solvent debts, \$32,087; merchandise, \$15,950; cotton manufactories, \$6,000; household and kitchen furniture, \$20,816; farm and other animals, \$98,057; plantation and mechanical tools, \$8,795; watches, jewelry, etc., \$1,888; value of all other property, \$22,818; real estate, \$179,368; personal estate, \$207,446. Aggregate value of whole property, \$386,814.

Property returned by colored taxpayers: number of acres of land, 5,017; value of land, \$4,502; household and kitchen furniture, \$1,012; farm and other animals, \$3,262; plantation and mechanical tools, \$322.00; value of all other property, \$190.00. Aggregate value of whole property, \$9,783.

The tax returns for 1901 show an increase of \$1,917 in the value of all property over that of 1900.

Population of Charlton county by sex and color, according to the census of 1900: white males, 1,468; white females, 1,381; total white, 2,849; colored males, 419; colored females, 324; total colored, 743.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 13 calves, 14 steers, 1 bull, 15 dairy cows, 6 horses, 10 mules, 86 swine.

CHATHAM COUNTY.

Chatham County is on the Georgia coast with the Savannah river forming the boundary between it and the State of South Carolina. It is a portion of what was once called Savannah county; for in 1741 by order of the trustees the colony of Georgia, was divided into two counties, one of which was called Savannah and embraced all the territory north



WHITE PLYMOUTH ROCK HEN

of Darien. It was laid out in 1758 into St. Philip's and Christ Church parishes.

When Georgia cast in her lot with the other colonies in the struggle for independence, the new State government formed Christ Church and a part of St. Philip's parishes into a county and named it Chatham in honor of the noble earl who so bravely stood up for the rights of the people of America.

Northwest of this county is Effingham, on the east and northeast the State of South Carolina, on the east and southeast the Atlantic Ocean, on the south and west the county of Bryan. The chief streams are the Savannah, Big and Little Ogeechee rivers. The smaller are the St. Augustine, Vernon, Pipemaker, etc. The face of the county is flat, interspersed with many swamps. Along the Savannah river the bodies of tide swamp lands are extensive and are considered among the best in the State.

Savannah, the county site, is the great maritime mart of the South Atlantic coast. It is the third cotton port in the Union, and is the chief shipping point for naval stores in the world. Its population by the census of 1900 is 54,244. It is situated on the southwest bank of the Savannah river, on a bluff forty feet above low water mark, twelve miles by a direct line from the ocean, and eighteen miles by the course of the river. Five lines of ocean steamships connect it with the great seaport cities of the North. Four lines of river steamers ply upon the Savannah, and on the sounds and inlets that flow between the mainland and the beautiful islands skirting the Georgia coast. Here also converge five great railroad lines, the Plant System, the Georgia & Alabama of the Seaboard Air Line System, the Florida Central and Peninsular of the same system, the Southern System, and the Central of Georgia system. The numerous arms of these great trunk lines stretch out into all sections of Georgia and Florida, and many parts of Alabama, also giving through routes to the North and East and a continuous line to the West. The Central has the distinction of being the oldest railroad in Georgia. All these grand highways of travel and commerce pour into the lap of Savannah the rich products of Georgia, Alabama and Florida, which, by great ocean steamers and sailing vessels, large and small, find their way to American and foreign ports. The commerce of Savannah for the year ending September 1, 1900, is valued at \$165,775,000. In 1874 the usual high water draft of vessels to the city was about fourteen and a half feet. At that time the United States Engineering Department took charge of the work of improving Savannah Harbor. In 1890 a navigable channel 22 feet deep at mean high tide from the city to the sea had been secured. To-day (1901) Savannah has a clear depth of 26 feet. The tonnage of the port, which in 1873 was 1,074,367 tons, had grown by 1890 to 1,828,614 tons, and for the year 1899 was 2,797,626 tons. For 1900 the tonnage of the port was 2,958,718, an increase of 161,092 tons. Vessels of from 2,000 to 5,000 tons now enter the harbor and load at the wharves of Savannah. It is expected that further improvement in the river and harbor will be accomplished through the

South channel, by which 26 to 28 feet at mean low water can be obtained and maintained without jetties. This course would shorten the distance by about three miles between the city and the sea.

For many years past the annual receipts of cotton at the port of Savannah have been more than a million bales. For the season of 1899-1900 they were again more than a million, notwithstanding the great falling off in cotton production and the deficit of 22 per cent. in general receipts, "a high compliment," says the Savannah Board of Trade, "to the railways entering here, the persistent efforts of which with the cooperation of the shipping agents of the port, have achieved this enviable preeminence for Savannah." About 80 per cent. of the entire crop of sea-island cotton is received at Savannah.

It is notable that during the past year there has been an increase weekly of the cotton factory products of the different Southern mills through Savannah to China and Japan. These products are sent by rail to Savannah and from there by steamer to the Eastern ports, and are there forwarded direct to the above-named countries.

The average annual receipts of naval stores at Savannah for the four years ending March 31, 1900, amount to 320,543 casks of spirits of turpentine and 1,159,732 barrels of rosin. These products are carried from Georgia's great port in vessels under every flag to leading markets on the coast of Europe, Africa, Asia, Australia, and South America, while coastwise steamships and great railroad lines supply Baltimore, Philadelphia, New York, Boston, Montreal and commercial cities of the interior. Wherever naval stores are needed for any purpose whatever, Savannah supplies by far the largest per cent. of that need.

The shipments of lumber from Savannah have grown to immense proportions. For the year ending March 31, 1890, the shipments were 107,371,082 feet, which in two years increased to 140,243,603. Something over $\frac{1}{2}$ of this was shipped to foreign ports. The largest foreign shipments were to Spain and the Argentine Confederation. The shipments of lumber for the year ending September 1, 1900 were 167,000,000 feet.

The bank clearings of Savannah for the year ending September 1, 1900, show an increase of \$65,730,295.51 over the previous year. The clearings for the year made up a grand total of \$200,270,626.63. The revival of the sugar-cane industry in Georgia and Florida will soon give to these States a companion money crop with cotton, that can be made profitable even against free trade with Cuba and Porto Rico. This will add to the commercial importance of Savannah.

The favorable year for the rice planters of Georgia increased the receipts of rice at Savannah, which were for 1900, 270,000 bushels. There are at Savannah three large mills for cleaning rice, and the total output of these mills is valued at \$300,000.

The market gardens and truck farms of Chatham county add, of course, to the prosperity of Savannah. A great deal of the best land of the county is being used to grow vegetables, melons, and berries for the Northern markets. In 1900 the shipments amounted to 100,000 crates

and 50,000 barrels of the truck farms, bringing to the farmers a revenue of \$225,000.

The shipments of the market gardens and truck farms commence to be forwarded by steamer from Savannah to the markets of the East between the first and middle of April each year. While many of these products are shipped by rail, a large number go by water, as the steamship lines have averaged a daily sailing from Savannah to the ports of the East. The vessels of the Ocean Steamship Company often take 60,000 melons at one time to New York.

Under the liberal sanitary appropriation all garbage is disposed of by cremation. The most improved plans for disinfecting purposes in maritime sanitation have been adopted, and the quarantine system is very thorough. The care of the city government for the health of the people has placed Savannah in the front rank of seaport towns in point of healthfulness. Pure water is furnished by artesian wells, with which Savannah is well supplied.

Of course Savannah and the county of Chatham have a fine system of public schools. The average attendance is: of white pupils 3,595, of colored pupils 2,914. Churches of every Christian denomination are numerous and well attended and maintained. The city has all the modern conveniences; electric lights, gas, ice factories, electric street railroads, city and suburban, a splendid system of water-works, and a first-class paid fire department. In manufacturing, Savannah has every advantage. The raw materials for the manufacture of cotton and woolen goods are at her very doors. Among her manufacturing establishments in successful operation are: a cotton yarn mill, a knitting mill, cotton seed oil mills, works for making agricultural implements, ice factories, boiler works, machine shops, brass foundry, brick manufactories, sash, door, and blind factories, carriage works, flour and grist-mills, rice-mills, fertilizer works, cigar manufactories, soap works, and planing-mills. The Southern Rubber Manufacturing Company has been lately organized.

There are four oyster canning factories in Chatham county which, in the season of 1899-1900, packed 2,550,000 cans.

Not only is Savannah a great commercial mart. It is also one of the most attractive cities of the Union. With its many beautiful parks and neat residences it has an air of elegant refinement that charms the stranger. The favorite promenade of the citizens is out Bull street to Forsyth Park. From Bay Street out, one passes through five little parks, or squares. In Johnson Square is a neat marble obelisk, erected in 1829 to the memory of General Nathaniel Greene who, as second in rank under Washington, commanded the department of the South and rescued the Carolinas and Georgia from the grasp of the British invader. He was born in Rhode Island, but after the close of the war for independence settled in Georgia upon land granted him by the State. The plain, unornamented style of this monument was meant to carry out the design of a Roman sword, which it was built to represent. The next monument on Bull street is one erected to the memory of W. W. Gordon, a pioneer in railroad development in Georgia. In Madison Square stands the

monument of another Revolutionary hero, Sergeant William Jasper. This was unveiled in 1888 in the presence of President Cleveland and party, and the local officials and dignitaries. In Monterey Square stands another and very elegant monument to Count Pulaski, the noble Pole, who gave his life for American freedom on the 9th of October, 1779, when the combined French and American armies met a disastrous repulse in their assault upon the British lines. In the extension of Forsyth Park is yet another handsome monument erected to the memory of the Confederate soldiers who fell in the Civil War. This park is the largest of about thirty, which give comfort and beauty to Georgia's lovely Forest City. In its center stands a fountain modeled after that in the Place de la Concorde at Paris. Some of the parks are ornamented with banana trees, and several of the gardens with orange trees. Among the many lovely flowers the most beautiful is the *Camellia Japonica*, which here blooms in midwinter in the open air.

Savannah is well supplied with suburban retreats. Tybee is reached by one of the branches of the Central of Georgia Railway, eighteen miles in length. The beach at Tybee is one of the best in the country, and the hotel accommodations are excellent. An electric railway leads to Thunderbolt, a small, picturesque town on Warsaw river, famous for fish and oysters. On the same line of railway is Bonaventure, once a noble estate of the Tattnall family, now a beautiful cemetery. Its avenues of great live oaks, festooned with gray moss, give to the place an air of solemn grandeur well befitting the silent resting place of the dead. The place was first settled by Colonel John Mullryne, an Englishman. By the marriage of his daughter Mary in 1761 to Josiah Tattnall of Charleston, it came into the possession of the latter family. Tradition says that the marriage was the occasion of planting these magnificent oaks so arranged that the avenues by which they are lined would form the letters "M" and "T," to typify the union of the two families. In 1847 the estate passed into the hands of Captain P. Wiltberger, by whom it was adapted to its present use. The electric cars also run to the Isle of Hope, another summer resort of the people of Savannah. About two miles from Savannah is the Jasper Spring, the scene of a daring exploit of Sergeant Jasper, when he and Sergeant Newton rescued from the British guard an American prisoner who was being carried to Savannah for execution. On the banks of the Ogeechee river are some of the largest rice plantations in Georgia. A canal connects this river with Savannah.

The area of Chatham county is 400 square miles or 256,000 acres. The population in 1900 was 71,239; school fund \$37,306.

By the Comptroller-General's report for 1900 there are: acres of improved land, 189,026; value of improved land per acre, \$15.10; city property, \$19,037,370; money, etc., \$2,057,990; gas and electric light companies, \$201,420; merchandise, \$1,652,800; value of shares in bank, \$2,537,625; stocks and bonds, \$859,275; building and loan associations, \$489,110; household furniture, \$574,110; farm and other animals, \$178,200; capital invested in shipping and tonnage, \$568,950; plantation and mechanical tools, \$100,855; watches, jewelry,



OCEAN STEAMSHIP COMPANY'S WHARF, SAVANNAH, GA.

etc., \$50,125; cotton manufactories, \$60,750; value of all other property, \$235,990; real estate, \$21,881,803; personal estate, \$9,449,690. Aggregate value of whole property, \$31,331,493.

Property, returned by colored taxpayers: number of acres of land 5,899; value, \$266,625; city or town property, \$632,475; household furniture, \$2,785; merchandise, \$2,625; farm and other animals, \$9,810; plantation and mechanical tools, no report. Aggregate value of whole property, \$914,320.

The tax returns of 1901 show a gain over 1900 of \$328,319 in the value of all property.

Yields of crops in Chatham to the acre with fair cultivation: corn, 20 bushels; Irish potatoes, 100 bushels; sweet potatoes, 100 bushels; crab-grass hay, 4,000 pounds; ribbon-cane syrup, 350 gallons. The county had in 1890 1,000 sheep with a wool-clip of 1,220 pounds; 3,866 cattle, 1,499 milch-cows, 520 horses, 590 mules, 4 donkeys, 4,320 swine, 10,399 poultry. There was a production of 25,000 dozen eggs, 1,855 pounds of honey, 9,000 pounds of butter, and 167,762 gallons of milk and 500 pounds of cheese. These statistics do not include horses and mules in Savannah.

In the brief historical sketch with which this work opens are mentioned several of the important events that have transpired in the history of Savannah and Chatham county. Another event worth mentioning is the fact that the first steamship that ever crossed the Atlantic sailed from Savannah in 1819. It was owned in Savannah, though built in New York. It made a successful voyage to Liverpool, England, and then to St. Petersburg in Russia.

Savannah has always been among the most patriotic of American cities. She bore her full share of the disasters and glories of the war for independence, and during the great Civil War her sons were among the foremost in responding to call of their State. Fort Pulaski, on Cockspur Island, was in 1862 the scene of a brave but fruitless defence by a Savannah garrison, commanded by Colonel Olmstead. Fort McAllister, sixteen miles from the city on the Ogeechee river, scored several victories over Union fleets, and, when Sherman appeared before the city in 1864, this fort was held by Major Geo. W. Anderson with 150 men. An assault was made upon the fort by nine regiments numbering between 3,000 and 4,000 men, led by Brigadier-General Hazen. The greatest compliment that could be paid the brave garrison is contained in the words of the Federal general who made the assault. "We fought the garrison through the port to their bomb-proofs, from which they still fought, and only succumbed as each man was individually overpowered." The Federals in this affair lost 134 officers and men killed and wounded, and the total loss of the garrison was 48.

During the Spanish-American war the best families of Savannah were represented in the Savannah Volunteer Battalion which enlisted in a body and under its own officers. Savannah was made by the War Department a port for embarkation and debarkation of troops. The result greatly promoted the business interests of Savannah and advertised her splendid advantages in an extraordinary manner.

EXPORTS.

General statement by articles and countries, of merchandise, the growth, produce and manufacture of the United States, exported to foreign countries from the customs district of Savannah, Ga., for the year ending August 31, 1900.

COUNTRIES.	COTTON.						COTTON SEED.		All other Cotton Seed Products	PHOSPHATE ROCK.		
	Sea Island.			Upland.			Pounds.	Dollars.		Dollars.	Tons.	Dollars.
	Bales.	Pounds.	Dollars.	Bales.	Pounds.	Dollars.						
Argentine Republic.....				12,400	6,147,578	467,484						
Austria.....				6,275	3,107,361	288,919		600	25	51,200	1,658	24,800
Belgium.....											11,803	118,530
Brazil.....												
France.....	2,155	854,570	138,533	37,124	18,591,613	1,331,432				73,622		
Great Britain.....	33,167	13,167,686	2,055,873	148,063	74,824,443	5,810,888		17,184,241	140,851	122,816	17,457	174,570
Germany.....	982	398,025	56,808	358,796	176,613,612	14,009,946		846,297	6,190	1,950	65,209	673,821
Italy.....				49,697	23,788,154	1,844,201					2,012	20,120
Netherlands.....				650	318,598	23,245				15,300	17,650	193,436
Russia.....	100	39,832	6,500	16,925	8,439,266	649,599						
Spain.....				46,497	23,167,125	2,014,708						
Sweden and Norway.....				2,400	1,192,806	83,378					8,319	82,571
West Indies.....												
Japan.....				14,352	7,137,024	536,652					2,687	26,870
All others.....												
Totals.....	36,404	14,459,963	2,252,214	692,199	343,327,579	27,095,848		18,031,048	147,066	264,888	128,790	1,814,718
Totals 1898-'99.....	7,940	3,188,946	434,872	608,742	16,816,028	16,261,028		1,273,627	12,281		72,270	723,724

EXPORTS FROM PORT OF SAVANNAH.—Continued.

COUNTRIES.	NAVAL STORES.				PIG IRON.		ALL OTHER IRON.		LUMBER.		SAWN TIMBER.		HEWN TIMBER.		ALL OTHER.	Tot'l Value of Domestic Merchandise.
	Spirits Turpentine.				Tons	Dollars.	Tons	Dollars	1,000 Feet	Dollars	1,000 Feet	Dollars	Cubic Feet.	Dollars.		
	Barrels.	Dollars.	Gallons.	Dollars.												
Argent'e Rep	44,756	\$ 82,901													\$ 228	\$ 83,129
Austria	74,646	102,025	21,208	11,217	4,755	\$ 103,120	744	\$ 14,880								774,714
Belgium	87,975	134,000	2,562,506	1,172,683							145	\$ 1,815			3,439	1,719,388
Brazil	32,462	48,968							204	\$ 2,809						46,775
France									10	180	115	1,880			450	1,540,597
Great Britain	214,671	348,003	5,595,632	2,607,310	8,262	67,179			956	14,085	1,822	23,776	913	\$ 145	54,286	11,419,340
Germany	274,195	395,102	1,620,975	746,079	348	6,550			509	7,244	2,344	28,415	51,749	7,792	58,540	15,998,437
Italy	61,931	85,475	129,656	61,640	1,663	28,785	5,175	101,478	187	2,110	147	2,539			1,100	2,147,443
Netherlands	104,147	188,114	1,813,475	790,418					40	800	24	805			88,803	1,230,421
Russia	108,871	181,985														888,084
Spain	10,228	14,800							1,902	29,926					29,420	2,088,654
Sweden & Nor.	6,435	9,075														175,019
West Indies																28,294
Japan	85	46							746	11,006					17,288	563,568
All others	71,001	100,640	500	250					1,706	28,152					4,137	183,179
Totals	1,091,353	\$ 1,635,932	11,743,951	\$ 5,389,597	10,028	\$ 205,634	5,919	\$ 116,368	6,210	\$ 96,922	4,507	\$ 58,280	52,662	\$ 7,937	\$ 207,691	\$ 38,757,045
Totals 1898-9	1,109,229	\$ 1,531,441	10,169,659	\$ 3,929,417					3,022	\$ 44,894					\$ 1,582,635	\$ 24,498,297

IMPORTS.

Port of Savannah, Ga., from September 1, 1899, to August 31, 1900:

MERCHANDISE.	Quantity.	Value.
Cement, pounds.....	36,147.449	\$ 106,431
Fertilizers, tons	15,438	94,708
Muriate of potash, pounds	4,132,721	63,001
Pyrites, tons	28,307	58,227
Nitrate of soda, tons.....	1,476	40,411
Jute bagging.....		29,111
Iron and steel manufactures		20,017
Brimstone, tons.....	751	18,675
Salt, pounds	6,291,125	7,317
China clay, tons	888	3,681
Sulphate of potash, pounds.....	169,151	2,826
Wines and liquors, gallons	1,660	2,652
Carbolineum.....		2,494
Mineral water, gallons	14,989	1,953
Cotton manufactures		1,285
Leather manufactures.....		1,148
Oranges.....		802
Aniline dye		688
Malt liquors		677
All other articles.....		8,127
Total		\$ 461,676

Population of Chatham county by sex and color, according to the census of 1900: white males, 15,223; white females, 14,707; total white, 29,930; colored males, 19,559; colored females, 21,750; total colored, 41,309.

Population of Savannah by sex and color, according to the census of 1900: white males, 13,134; white females, 12,975; total white, 26,109; colored males, 12,791; colored females, 15,344; total colored, 28,135.

Total population of Savannah, 54,244.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 172 calves, 156 steers, 16 bulls, 655 dairy cows, 1,897 horses, 636 mules, 3 donkeys, 177 sheep, 669 swine, 112 goats.

Domestic animals in barns and inclosures in the limits of the city of Savannah, June 1, 1900: 51 calves; 17 steers, 3 bulls, 343 dairy cows, 1,561 horses, 504 mules, 2 donkeys, 77 sheep, 1 hog, 80 goats.

CHATTAHOOCHEE COUNTY.

Chattahoochee County was formed from Muscogee and Randolph in 1854, and was named for the river, whose waters wash its western border. It is bounded on the north and northwest by Muscogee county, east by Marion, south by Webster and Stewart, and west by the State of Alabama. It contains 231 square miles and its mean elevation is 375 feet.

Cusseta, the county site, is a small town on a branch of the Georgia

and Alabama Railroad, now a part of the great Seaboard Air Line system. A branch of the Central of Georgia system also traverses the county, bringing its people into close business relations with Columbus, Americus and Albany, the three leading cities of Southwest Georgia. Besides the two railroads the steamboats on the Chattahoochee river afford excellent facilities for freight and travel. The face of the country is level. The soil is entirely cretaceous, a gray, sandy loam with clay subsoil. The average yield to the acre is: corn, 10 bushels; wheat, 10 bushels; oats, 15 bushels; cotton, 500 to 600 pounds; sugar-cane, 14 to 16 pounds of sugar and 150 to 200 gallons of syrup. There are also raised annually about 1,000 pounds of upland rice, 9,166 bushels of cow-peas, 1,485 bushels of peanuts, 250 bushels of Irish potatoes, 13,235 bushels of sweet potatoes. There are 4,000 apple-trees, 17,126 peach-trees, 6,651 plum-trees. Truck raised above home consumption and sold amounts to \$3,000.

The people are waking to the fact that it costs no more to raise a good cow than a poor one, and are beginning to pay more attention to breed. This is true of all other kinds of stock in the county.

According to the United States census of 1900 the cotton ginned in this county for the season of 1899-1900 was 5,039 bales, all upland.

By the census of 1890 there were 22 sheep with a wool-clip of 250 pounds, 2,629 cattle, 870 milch-cows, 161 working oxen, 3,373 hogs, 16,005 poultry of all kinds, 248 horses and 639 mules.

Among the farm products were 132,855 gallons of milk, 38,878 pounds of butter, 6,082 pounds of honey and 31,028 dozens of eggs.

The manufactories consist of flour and grist-mills, run by water and sawmills run by steam. On the tributaries of the Chattahoochee river there are seven mills (flour and grist), and there are good water-powers on Woolfolk's branch and Oswichee creek. The growth is chiefly piney woods. The timber products are not extensive. Some yellow pine and hardwoods are lumbered, the annual output being worth about \$8,000. There are six sawmills run by steam.

The churches are mostly Methodist, Baptist and Presbyterian. The schools belong to the public school system of the State, and number 12 for whites and 15 for negroes, with an average attendance of 268 white and 441 colored pupils.

Area of Chattahoochee county, 231 square miles, or 147,840 acres.

Population in 1900, 5,790; school fund, \$4,155.95.

By the Comptroller-General's report for 1900 there were: acres of improved land, 188,340; average value per acre of improved land, \$2.28; cotton manufactories, \$1,600; value of city property, \$14,553; money, etc., \$17,959; value of merchandise, \$6,845; iron works, \$400; value of household and kitchen furniture, \$24,280; mining, \$411.00; farm animals, \$65,832; plantation and mechanical tools, \$14,663; watches, jewelry, etc., \$6,405; value of all other property, \$8,380; real estate, \$366,566; personal estate, \$167,430. Aggregate, \$533,996.

Returns of property by colored taxpayers: number of acres of land, 7,955; value of land, \$14,399; city or town property, \$75.00; merchan-

dise, \$300.00; household and kitchen furniture, \$5,207; farm and other animals, \$10,962; plantation and mechanical tools, \$1,504; value of all other property, \$655.00. Aggregate value of all property, \$34,163.

The tax returns for 1901 show a gain over 1900 of \$27,254 in the value of all property.

The county seat is Cusseta, on the Seaboard Air Line Railroad. The population of the Cusseta militia district in 1900 was 1,078, of which 301 lived in the town.

The population of the whole county (5,790) shows a gain of 888 over that of 1890.

On the Seaboard Air Line to the northwest of Cusseta is the village of Sulphur Springs, noted for its mineral waters.

Population of Chattahoochee county by sex and color, according to the census of 1900: white males, 943; white females, 909; total white, 1,852; colored males, 1,922; colored females, 2,016; total colored, 3,938.

No report of domestic animals in barns or inclosures June 1, 1900.

CHATTOOGA COUNTY.

Chattooga County was laid off from Walker and Floyd in 1838 and derived its name from its principal river. The county is traversed by mountains and ridges running northeast and southwest, and is interspersed with rich and beautiful valleys, the most noted being Broomtown, Chattooga and Armuchee. The mountains are Taylor's Ridge, John's Mountain and a high, solitary peak called Dirtseller Mountain, whose Indian name was Kunteesky.

Chattooga is bounded by the following counties: Walker on the north, Gordon on the east, Floyd on the south and southeast. The State of Alabama bounds it on the west.

The bottom and valley lands are very fertile, having a dark mulatto soil, which produces cotton, corn, wheat, oats, rye, peas, potatoes, clover, barley, tobacco and almost every kind of vegetable. Taking all the lands, good and poor, the average yield of the various crops per acre is as follows: seed cotton, 750 pounds; corn, 20 bushels; wheat, 10 bushels; oats, 15 bushels; field-peas, 15 bushels; Irish potatoes, 50 bushels; sweet potatoes, 200 bushels; crab-grass and clover, each 5,000 pounds of hay.

On some of the best lands 30 bushels of wheat to the acre are the ordinary yield. Those same lands produce 40 bushels of corn to the acre and in a few instances as high as 90 bushels have been raised on one acre in especially good seasons. The people are beginning to realize the profit in hay and are raising it for the market. The cotton ginned in this county during the season of 1899-1900 was 7,079 bales, all upland.

The market gardens near the towns are doing well. The shipments of strawberries during the seasons of 1900 and 1901 have demonstrated the fact that Chattooga county is especially adapted to the production of this luscious fruit. This year (1901) this county shipped 38 car-loads of ber-

ries to northern markets, bringing in every instance a handsome profit to the shippers.

The ridges, which, running in a northeasterly and southwesterly direction and parallel to Lookout Mountain, traverse the county, form the fruit lands of Chattooga. No finer peaches and strawberries are grown than on these hills and ridges. Even now they are dotted by 600,000 peach-trees, and the number is being increased every year, and when all these come into bearing it is estimated that Chattooga county alone will send 2,000 car-loads of peaches to the northern markets annually.

There are also vineyards producing fine grapes. Upon the northwestern border of the county is the famous Lookout Mountain, whose table-land twelve miles wide and extending along its entire length, is unexcelled in the growth of apples, and large apple orchards are being set out now.

The table-lands of Lookout and of the parallel ridges furnish an almost inexhaustible range for cattle which thrive without additional food for two-thirds of the year.

By the census of 1890 there were in Chattooga county 3,116 sheep with a wool-clip of 5,558 pounds, 6,032 cattle, of which 478 were working oxen, and 2,159 milch-cows (175 of these being of improved breeds); 10,614 hogs, 92,996 domestic fowls of all kinds, 1,030 horses, 1,217 mules and 5 donkeys.

Among farm products were 739,177 gallons of milk, 242,897 pounds of butter, 19,168 pounds of honey and 134,019 dozens of eggs.

More attention is being paid to beef cattle and several Devon bulls have been imported from Tennessee and Kentucky.

About one half of the county is in original forest, pine and hardwoods, all available for market, and giving employment to about 24 sawmills which prepare timber for the local markets. Taylor's Ridge, which runs from High Point in Chattooga to Ringgold in Catoosa county, a distance of 40 miles, is well-wooded with white oak, chestnut, oak and poplar. From the chestnut oak is obtained a tan bark that is always in demand, and the poplar is used in the manufacture of fruit crates. The price of the timber is from \$8.00 to \$10.00 a thousand feet.

Iron, bauxite, clay, limestone, manganese, coal, slate, talc and sandstone are found in large quantities. Iron is mined at Dirtseller Mountain, near Lyerly; Shinbone ridge, near Menlo and Taylor's ridge near Summerville. All this iron is shipped to other points. Bauxite is mined in the town of Summerville, and there are outcroppings of this metal in ridges entirely through the county. Red iron ore is found in great abundance in six different veins and is being mined in some localities. Mining property, though cheap, is steadily advancing. During the last two years an immense amount of iron ore has been shipped from the mines on Taylor's ridge.

Some of the manufactories of Chattooga county are: The Trion Manufacturing Company's mills, the Raccoon Mills, a chair factory at Lyerly, 6 flour-mills operated by water-power, 12 grist-mills, some by water and

some by steam; 24 sawmills, about one half being operated by water and half by steam; and 6 tanneries.

Summerville, the county site, on that part of the Central of Georgia system, formerly known as the Chattanooga, Rome and Southern, is situated about half way between Rome and Chattanooga. The business houses and residences are handsome in appearance, and the streets have been put in fine condition by the free use of chert. The town is surrounded by farms which are cultivated in a thoroughly scientific manner. The region in its immediate vicinity is rich in hardwoods and iron ore. During the spring of 1901 there were shipped from this point 157 cars of iron ore, 65 cars of logs and over 100 cars of chert. It is claimed that within the last five years about 10,000 cars of chert have been shipped from this neighborhood to various cities to be used in improving their streets, and for roads and railways.

Although by the census of 1900 there were only 486 persons living in the town of Summerville, the entire Summerville district has a population of 2,261, and includes also Raccoon Mills, with 441 people, many of whom are employed at the Raccoon Cotton Mills, which has 104 looms, 3,400 spindles and a capital of \$164,700.

Lyerly, in the midst of the productive valley of the Chattooga river, is also on the Central Railway, southwest of Summerville. Here there is a chair factory whose products find a ready sale throughout this section. The Lyerly district has 729 inhabitants, of whom 234 live in the town. Lyerly has also a first-class grist-mill on the Chattooga river.

Trion is the largest town in Chattooga county, having in 1900, a population of 1,926 in the town and in the entire Trion district, 3,020. Here is the Trion Manufacturing Company's plant, consisting of three mills with an aggregate of 1,422 looms, 50,016 spindles and a capital of more than \$600,000. The capital stock and surplus of the company approximate \$1,000,000, and the yearly business amounts to \$1,200,000. These mills consume daily 20 tons of coal and use 60 bales of cotton. They manufacture sea-island sheeting, shirting, drills and rope.

The first mill was built here in 1847 by Judge A. P. Allgood of Walker county, and Judge Spencer Marsh of LaFayette, in partnership with Colonel W. K. Briers, who began with a capital stock of \$25,000. This factory escaped destruction during the war but was destroyed by fire in 1875.

In 1876 the Trion Manufacturing Company built number 1 of its present plant and have been steadily adding to their property. The name Trion was given to the factory and town from the trio of men, Allgood, Marsh and Briers, who were the originators of this great enterprise, built and operated by Georgia capital.

Menlo, on the Chattanooga Southern Railroad, about forty miles from Chattanooga, Tennessee, and the same distance from Gadsden, Alabama, is in the midst of a fine farming and fruit section. It has fine mineral springs, possessing excellent medicinal properties. Near by are also valuable iron ore deposits.

All these towns are provided with good schools and churches of the

Methodists, Baptists, and Presbyterians. In fact, every section of the county is well provided with educational and religious advantages.

In the 33 public schools for whites there is an average daily attendance of 1,169 pupils and in the 12 schools for negroes a daily attendance of 256 pupils.

The State School Commissioner, in his report published in 1900, gives the public school fund of Chattooga county as \$8,758.72.

The area of Chattooga county is 326 square miles or 208,640 acres.

Population of the county in 1900, 12,952; a gain of 1,750 since 1890.

By the Comptroller-General's report for 1900 there are: acres of improved land, 170,644; of wild land, 40,957; average value per acre of improved land, \$4.85; of wild land, \$0.53; city or town property, \$76,717; value of shares in bank, \$18,650; money, etc., \$234,512; merchandise, \$73,860; stocks and bonds, \$30,640; cotton factories, \$558,070; capital invested in mining, \$50.00; value of household and kitchen furniture, \$83,035; farm and other animals, \$181,961; plantation and mechanical tools, \$40,485; jewelry, \$6,405; value of all other property, \$19,293; real estate, \$916,069; personal estate, \$1,252,675. Aggregate, \$2,168,744.

Property returned by colored taxpayers: number of acres of land, 3,919; value, \$11,539; city or town property, \$3,810; money, \$573.00; household furniture, \$4,444; farm and other animals, \$10,713; plantation and mechanical tools, \$1,415; value of all other property, \$331.00. Aggregate, \$32,971.

The tax returns of 1901 show a gain over 1900 of \$13,136 in the value of all property.

Broomtown Valley is named from a little Indian settlement so called from its chief, "The Broom," one of the signers of a treaty concluded between the Cherokees and Whites at Tellico, October 24, 1804.

Sequoia or George Guess, the inventor of the Cherokee alphabet, formerly resided in Chattooga county. Though in appearance a full Cherokee, his paternal grandfather was a white man. One day he heard some Cherokee young men talking about the superior talents of the white people, and expressing particular wonder at the fact that white men could put a talk on paper and send it to any distance, and it would be understood by those who received it. Mr. Guess determined that his people should have an alphabet too. He had no knowledge of any language but the Cherokee, and had to depend upon his own native resources. He first tried to invent a sign for every word, but soon found that such an alphabet would be too cumbersome. He at length conceived the idea of dividing the words into parts. He had not proceeded far on this plan before he discovered to his great delight that the same characters would apply in different words. He finally discovered all the syllables of the language. After this he completed his system in about a month. In forming his characters he used some of the English letters which he found in a spelling-book. But he made his characters represent syllables, not letters. Hence they expressed in Cherokee very different sounds from what they did in English. At last he succeeded after much opposition in getting a

few of his people to learn the use of his syllabic alphabet. Finding that it worked all right they were so delighted that in the course of a few months the great majority of the Cherokees were able to read and write in their own language.

Population of Chattooga county by sex and color, according to the census of 1900: white males, 5,277, white females, 5,437; total white, 10,714; colored males, 1,146; colored females, 1,092; total colored, 2,238.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 128 calves, 113 steers, 2 bulls, 226 dairy cows, 111 horses, 29 mules, 3 donkeys, 20 sheep, 451 swine, 2 goats.

CHEROKEE COUNTY.

Cherokee County was laid out in 1832 and was named for the nation of Indians who inhabited that section of Georgia and large portions of North Carolina before the purchase of their lands by the whites and their removal beyond the Mississippi river.

The word Cherokee is derived from *Chera*, fire, and the prophets of the nation were called *Cheralaghye*, which signifies *men of divine fire*. The following counties bound Cherokee: Pickens on the north, Dawson and Forsyth on the east, Milton on the southeast, Cobb on the south and Bartow on the west. The Etowah river flows almost through the center of the county. Little river empties into the Etowah. The creeks are Cooper's, Sandy and Chicken.

That part of the county west of the Etowah and south of Long Swamp is very hilly, the part traversed by Little river and its tributaries is undulating, while most of the county east of the Etowah is hilly, except portions bordering on Forsyth county. Lands of excellent quality are on the Etowah river and Long Swamp. In the northwestern part of the county a peak, called Sharp Mountain, runs up like a sugar loaf.

The county abounds in fertile valleys. The soil of the bottom or lowlands is generally a rich, black loam with a little sandy land close to the water courses. That of the upland is partly red and mulatto, and partly gray. The staple crops are cotton and the cereals. In the western part of the county a high grade of chewing tobacco is grown, and upon this product the people of that section largely depend for their money crop. The number of acres planted in cotton last season was 20,000: in corn, 35,000; in wheat, 10,000; in oats, 10,000; in rye, 2,000; in sorghum-cane, 1,000; in Irish potatoes, 500; in sweet potatoes, 1,000. After the wheat and oats had been cut off, 5,000 acres were planted in field-peas. The average yield of these crops to the acre were: corn, 20 bushels; cotton, 700 or 800 pounds seed cotton to the acre; wheat, 12 to 20 bushels; oats, 20 bushels; rye, 10 bushels; sorghum, 200 gallons; Irish potatoes, 150 bushels; sweet potatoes, 125 bushels; field-peas 12 bushels; crab-grass hay, 4,000 pounds; clover hay, 5,000 pounds. Much of the land is well adapted to clover, orchard and other grasses, but very little attention has yet been given to them. Where cultivated they do well. For summer pasturage the native grasses chiefly are used. This lasts about six months. Some of the farmers use rye for winter

pasturage. Very few use ensilage. Cotton seed meal, wheat bran and peas are chiefly used as food for stock. Under the best systems of agriculture some of the best lands yield crops far ahead of the averages given above. Some attention is paid to dairying, for which the Jersey cow is preferred. There were in Cherokee county in 1890 7,600 cattle, 2,705 milch-cows, 806 horses, 1,609 mules, 3,362 sheep with a wool-clip of 5,616 pounds, 13,242 hogs, 130,000 poultry. There is a production of 174,000 dozens of eggs, 30,162 pounds of honey, 235,908 pounds of butter, 794,764 gallons of milk and 89 pounds of cheese.

Although the farmers sell some vegetables, berries and fruit, there are no regular market gardens in the county. There is about 60 per cent. of original forest timber still standing. The growth is hickory, oak, pine, poplar, some beech and ash, and a variety of other kinds. There are about six little sawmills, four or five small flour-mills, and about 30 small grist-mills and two tanning establishments.

Canton, the county seat, on the Atlanta, Knoxville and Northern Railroad, is beautifully situated on an eminence, around whose base flows the Etowah river. It is a thriving little town of 847 inhabitants, with a flourishing bank and several manufacturing enterprises. One of the most important of these is a marble mill for sawing and finishing marble and for monumental work. Another of great importance is the new cotton factory with a capital of \$100,000. There is also a rope factory. There is another cotton-mill at Toonigh, in the southern part of the county.

According to the United States census of 1900, the cotton ginned in the season of 1899-1900 was 6,760 bales, all upland.

Woodstock, Holly Springs and Ball Ground, are thriving villages on the railroad. From Ball Ground a little railroad, about eight or ten miles long and owned by one of the marble companies, runs out to the quarries.

At Waleska, eight miles west of Canton, is a fine school, known as Reinhardt Normal College. The public schools of the county are in good condition. They number 65 for white and 6 for colored, with an average daily attendance of 2,057 whites and 211 colored. There are Methodist, Baptist and Presbyterian Churches and one Universalist.

In minerals this county is very rich. There are deposits of gold, copper, iron, mica, talc, marble and other minerals. Cherokee is one of the chief gold-mining counties of Georgia.

Near Canton is a spring, strongly impregnated with alum, and noted for its great curative powers.

The area of Cherokee county is 434 square miles or 277,760 acres. Population in 1900, 15,243; school fund, \$10,627.53.

By the Comptroller-General's report for 1900 there are: acres of improved land, 255,457; of wild land, 20,019; average value per acre of improved lands, \$4.01; of wild lands, \$0.78; city or town property, \$148,913; shares in bank, \$21,700; money, etc., \$321,776; merchandise, \$81,485; stocks and bonds, \$5,080; cotton manufactories, \$6,050; household furniture, \$90,554; farm and other animals, \$188,473; plant-

ation and mechanical tools, \$47,848; iron works, \$7,500; mining, 400; watches, jewelry, etc., \$5,617; value of all other property, \$41,500; real estate, \$1,190,038; personal estate, \$845,506. Aggregate value of whole property, \$2,035,544.

Property returned by colored taxpayers: number of acres owned, 3,405; value, \$6,540; city property, \$2,520; household furniture, \$1,694; farm and other animals, \$3,173; money, \$1,150; plantation and mechanical tools, \$557.00; value of all other property, \$153.00. Aggregate value of whole property, \$15,888.

The tax returns of 1901 show a gain over 1900 of \$105,355 in the value of all property.

Cherokee county in common with the greater part of Northwest Georgia, is beginning to pay great attention to fruit-growing. Judge Gober of Cobb county, owns 75,000 peach-trees of the best variety in Cherokee county, and besides these are many smaller orchards. There are also many apple-trees.

The population of the leading towns and their including militia districts by the United States census of 1900 was as follows:

Canton district, 1,827, of whom 847 live in the town of Canton; Woodstock district, 1,240, of whom 276 live in the town of Woodstock; Harbin's district, 1,033, of whom 170 live in the town of Waleska; Ball Ground district, 1,101, of whom 302 live in the town of Ball Ground.

Population of Cherokee county by sex and color, according to the census of 1900: white males, 7,032; white females, 6,926; total white, 13,958; colored males, 645; colored females, 640; total colored, 1,285.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 87 calves, 21 steers, 8 bulls, 137 dairy cows, 106 horses, 49 mules, 3 donkeys, 293 sheep.

CLARKE COUNTY.

Clarke County was laid out from Jackson in 1801. A part was taken from Greene in 1802 and again in 1807. Part was set off to Madison county in 1811, part to Oglethorpe county in 1813. Another part was added to Madison county in 1829. Still later another part was taken to help form the new county of Oconee. Clarke county is bounded by the following counties: Madison on the north, Oglethorpe and Madison on the east, Oconee on the south and southwest, and Jackson on the northwest.

It was named in honor of General Elijah Clarke, the Marion of Georgia. The principal streams flowing through the county are Oconee river, Middle Oconee river, Sandy, Bear and Barber's creeks.

Athens, the county seat, is a flourishing city of 10,245 inhabitants in the corporate limits, or, counting the whole Athens district, 11,018. It is one of the chief seats of learning in Georgia. The founding of this city was simultaneous with that of the University of Georgia. Here are the main departments of the State University, the State Normal School,

PEACH TREE



and Lucy Cobb Institute, all of which are discussed fully in the chapter on education. Besides these are the Home School, several other private schools and the city public schools.

The Methodists, Baptists, Presbyterians, Episcopalians, Catholics and Christians or Disciples, have flourishing churches. The two first named are the most numerous, having more than half of the entire church membership of the county, occupying almost the entire field outside of the city.

Athens is the commercial center for several counties, and enjoys a large and growing trade. It has three banks with an aggregate capital of \$600,000. It is provided with gas and electric lights, electric street cars, a paid fire department with electric fire alarm, a splendid system of water-works, sewers and paved streets and sidewalks. Athens owns both her electric light plant and water-works. Here center branches of the Georgia Railroad and of the Central of Georgia and Southern Railway systems, also of the Seaboard Air Line system. The commerce of the city and county aggregate \$13,000,000 annually. The cotton receipts at Athens are from 65,000 to 90,000 bales per annum. From the entire county the shipments are about 100,000 bales a year. The cotton-mills of the county use about 12,000 bales per annum. The manufactories of every kind number about 100. There are five cotton-mills, in one of which (the Athens Manufacturing Company), woolen cloth is also made, one knitting mill, one bobbin mill, one cotton seed oil-mill, two foundries, two sash, door and blind factories, two ice plants, one establishment for the manufacture of fertilizers, and a wagon and carriage factory. There are also in Clarke county 15 grist and three flour-mills. The cotton mills have an annual output valued at \$1,500,000, and the product of the cotton seed oil-mill is worth about \$50,000. These are all run by water. There are in the county nine or ten valuable water-powers, ranging from 100 to 3,000 horse-power. Two of these, one of about 800, the other 3,000 horse-power, have been utilized since 1892.

There are some minerals, chiefly, graphite. Deposits of galena are in the northern part of the county. A fine quality of granite is found.

About 25 per cent. of the original forests of the county are still standing. The timber products are small, the lumber output not amounting to more than \$2,000 annually. The growth is pine, oak, poplar, hickory, birch, maple and ash.

The soil is principally a strong red clay, naturally fertile and retentive of fertilizers, and with intelligent cultivation yields abundantly of all staple crops and garden products. A belt of gray, sandy land, about three miles wide passes through the center of the county. The soil of these gray lands is about 16 inches deep with a yellowish or reddish clay sub-soil, not so retentive of moisture as that of the red lands. This soil is better adapted to cotton and oats, while corn, clover and wheat do best in the red land.

According to the United States census of 1900 the cotton ginned in the county for the season of 1899-1900 was 3,532 bales, all upland.

The average yield to the acre of the various crops is about as follows: cotton, 600 to 800 pounds; corn, 15 bushels; wheat, 15 bushels; oats, 11 to 18 bushels; rye, 20 bushels; Irish potatoes, 100 bushels; sweet potatoes, 125 bushels; hay from, 2,000 to 3,000 pounds, cow-peas, 20 bushels; ground-peas, 50 bushels.

The Irish potatoes raised, amount to 3,774 bushels, and the sweet potatoes to 18,422 bushels. On some of the lands under the best culture the above yields are more than doubled.

The county had in 1890 149 sheep, with a wool-clip of 277 pounds, 1,600 cattle, 786 milch-cows, 473 horses, 627 mules, 1,743 swine, and 24,210 poultry of all kinds. These statistics did not include horses and mules in the city of Athens. There are three dairy farms in prosperous condition. The Jersey cow is preferred. Ensilage is used to some extent for winter food. Bermuda grass is depended on a great deal for summer pasturage. Lucern and clover do well and a great deal of home-made hay is being marketed. A few farmers put it in bales which they find to be a profitable way to handle it. Other productions in 1890 were 198,263 gallons of milk, 66,296 pounds of butter, 440 pounds of cheese, 27,160 dozens of eggs, and 4,282 pounds of honey.

Truck sold amounts to \$10,000 dollars, the products being vegetables, berries and melons. There are in the orchards 2,679 apple-trees.

The public schools of Clarke county number 28. In the 11 schools for whites the average daily attendance is 288 pupils, and in the 17 for negroes, 448. In the local schools for whites in the city of Athens there are 871 pupils, and in those for negroes, 717. In the private schools for whites including pupils in the State University, Lucy Cobb Institute, Home School and others, there are 600 or more white pupils, and in two schools for negroes 484 pupils.

The school fund for the county is \$5,005.91 and for the Athens city schools, \$6,744.64.

The area of Clarke county is 159 square miles, or 101,760 acres.

By the United States census of 1900 the population was 17,708, an increase of 2,522 since 1890.

The following are the towns in Clarke county besides the city of Athens (already given), with their population and that of their including militia districts: Whitehall, 660, and in its entire district, known as Georgia Factory, 1,098; Princeton, 244, and in its entire district of the same name, 873.

The Comptroller-General's report for 1900 gives the following items: acres of improved land, 70,016; average value per acre of improved land, \$10.37; value of city or town property, \$2,752,670; shares in bank, \$460,000; money and solvent debts, \$746,035; stocks and bonds, \$399,695; merchandise, \$528,985; cotton manufactories, \$305,000; iron works, \$15,000; household and kitchen furniture, \$265,105; farm and other animals, \$100,750; plantation and mechanical tools, \$27,980; watches, jewelry, etc., \$60,715; value of all other property, \$43,425; real estate, \$3,472,495; personal estate, \$2,945,252; aggregate value of whole property, \$6,418,020.

Property returned by colored taxpayers: number of acres of land, 5,258; value of land, \$57,430; household and kitchen furniture, \$24,360; farm and other animals, \$12,490; city or town property, \$165,005; watches, jewelry, etc., \$720.00; plantation and mechanical tools, \$2,790; value of all other property, \$390.00. Aggregate value of whole property, \$263,795.

The tax returns for 1901 show a falling off in the value of all property amounting to \$1,985 since the return of 1900.

In the city of Athens is a tree which has a peculiar history. A beautiful oak was so admired by its owner that he made a deed to the tree itself of the ground in which it grew, so that it might be secured from molestation so long as it lived. The tree is surrounded by a little fence to protect it from trespassers.

There are exclusive of the city of Athens more than twenty miles of macadamized roads in Clarke county, to the extent of which constant additions are being made.

Population of Clarke county by sex and color, according to the census of 1900: white males, 3,878; white females, 4,352; total white, 8,230; colored males, 4,387; colored females, 5,091; total colored, 9,478.

Population of the city of Athens by sex and color, according to the census of 1900: white males, 2,387; white females, 2,666; total white, 5,053; colored males, 2,253; colored females, 2,939; total colored, 5,192. Total population of Athens, 10,245.

Domestic animals in barns and inclosures, not on farms or ranges, in Clarke county, June 1, 1900: 120 calves, 17 steers, 5 bulls, 522 dairy cows, 475 horses, 86 mules, 1 donkey, 715 sheep, 21 goats.

CLAY COUNTY.

Clay County was formed in 1854 from Early and Randolph, and was named in honor of Henry Clay of Kentucky, one of the greatest statesmen and most eloquent orators of the nineteenth century. The following counties bound it: Quitman on the north; Randolph on the east and also on the north of the lower section; Calhoun on the east of the lower section, and Early on the south. On the western side is Alabama, from which it is separated by the Chattahoochee river. Colomokee creek forms part of the boundary between Clay and Early counties. Through the northwest runs Pataula creek. Each of these creeks flow into the Chattahoochee river.

This was one of the three counties in Southwestern Georgia laid off in 1854 and named in honor of America's immortal trio, Clay, Calhoun and Webster. Clay county has two towns, Fort Gaines and Bluffton, the former having 1,305 inhabitants in its limits, and 2,775 in its entire district, and the latter 312 in the corporation and 2,232 in its entire district.

Fort Gaines is the county site and is beautifully situated on a bluff of the Chattahoochee, 160 feet above common water mark. The name

of the town is derived from a fort built here against the Indians in 1816, by order of General Gaines. It is the terminus of a branch of the Central of Georgia Railroad system. The Baptists and Methodists have churches in the town and county. The Presbyterians also have a church in Fort Gaines.

The public schools are well attended. There are 15 for white and 14 for colored pupils with an average attendance of 410 white and 650 colored pupils.

The bank has a capital of \$50,000. The court-house is valued at \$20,000. The value of the gas plant is \$5,000.

The country is comparatively level, and the most of it has an abundant growth of long-leaf pine. Along the Chattahoochee and some creeks the timber is oak and hickory.

The soil is gray in the uplands, and somewhat sandy on the lowlands. Some of the pine lands have a red clay formation and produce cotton finely. Under ordinary cultivation the average production to the acre of these lands is: corn, 10 bushels; 600 or 800 pounds of seed cotton; wheat, 12 bushels; oats, 15 bushels; rice 15 bushels; sweet potatoes, 100 bushels; sugar-cane syrup, 250 gallons.

According to the United States census of 1900 the cotton ginned in the county for 1899-1900 was 9,345 pounds, all upland.

Bermuda, Johnson and crab-grass, sorghum forage and pea-vine hay, furnish excellent food for stock. The people are paying more attention to grasses, and the hay industry is growing every year. Ten per cent. of the fertilizers used is produced on the farm, and 50 per cent. of the cotton seed raised is returned to the land as a fertilizer, either in the form of meal, or as green seed. There is one dairy farm having about 30 cows, which sells about 15 pounds of butter daily. The Jersey cow is the favorite. The feed used in addition to the grasses is cotton seed hulls and meal mixed with bran.

By the United States census of 1890 there were in the county 299 horses, 764 mules, 5,576 swine, and 21,403 domestic fowls of all kinds. The county produced in 1890 24,393 dozens of eggs, 1,101 pounds of honey, and 52,161 pounds of butter, and 174,322 gallons of milk.

All the cattle numbered 2,337, of which 134 were working oxen and 786 were milch-cows. There were no sheep reported for this county.

Melons, peaches and grapes grow well and are profitable. All kinds of vegetables and berries are raised successfully.

There are some good water-powers in the county. At Fort Gaines there is an artesian well, and in the county are several mineral springs.

At Fort Gaines there is one cotton seed oil-mill and guano factory, with a capital of \$50,000. There are also in the county ten flour and grist-mills, and five sawmills.

With the railroad running across the county and steamboats daily passing up and down the river, the freight rates are very satisfactory.

Area of Clay county, 216 square miles, or 138,240 acres. Population in 1900, 8,568, an increase of 751 since 1890; school fund, \$5,929.48.

By the Comptroller-General's report for 1900 there were: acres of improved land, 132,608; average value per acre of improved land, \$2.93; city or town property, \$127,172; bank stock,, \$50,000; money, etc., \$61,998; merchandise, \$54,080; stocks and bonds, \$30,000; value of household furniture, \$57,030; farm and other animals, \$83,875; plantation and mechanical tools, \$16,166; watches, jewelry, etc., \$4,351; value of all other property, \$17,426; real estate, \$515,860; personal estate, \$375,983. Aggregate, \$891,843.

Property returned by colored taxpayers: number of acres of land, 6,442; value, \$16,170; city or town property, \$6,567; merchandise, \$350.00; household furniture, \$8,194; farm and other animals, \$13,496; plantation and mechanical tools, \$2,220; value of all other property, \$802. Aggregate value, \$47,869.

The tax returns of 1901 show a gain of \$115,998 in the value of all property since the returns of 1900.

Population of Clay county by sex and color, according to the census of 1900: white males, 1,405; white females, 1,460; total white, 2,865; colored males, 2,675; colored females, 3,028; total colored, 5,703.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 56 calves, 4 steers, 4 bulls, 85 dairy cows, 120 horses, 15 mules, 2 donkeys, 316 swine, 7 goats.

CLAYTON COUNTY.

Clayton County was formed out of Fayette and Henry in 1858, and was named for Hon. Augustine S. Clayton of Clarke county, judge of the superior court, and in 1833 member of Congress. This gentleman was a student at the Academy of Richmond county in Augusta at the time of a visit to that city by George Washington, president of the United States in May, 1791. While in Augusta the president attended an examination of the students of the academy. Young Clayton was one of the several students appointed to speak upon that occasion. So well pleased was the president that upon his return to the capital he sent a book to each of the young orators, and the volume presented to Mr. Clayton was a copy of *Cæsar's Commentaries*.

Clayton county is bounded by the following counties: Fulton and DeKalb on the north; Henry on the east and on the south of the eastern section of the county and on the east of its western projection; Spalding on the south of this western projection, and Fayette and Campbell on the west. The soil belongs to the metamorphic formation, rolling red clay lands with retentive clay subsoil, and some gray, gravelly lands.

The water is pure freestone. The timber growth is chiefly oak and hickory, with ash, maple, walnut, poplar, gum and some second growth pine. The water-powers utilized are furnished by the Flint river and its tributaries. There are along these about 16 mills (flour and grist), using 228 horse-powers.

There are in the county about 13 manufacturing establishments of

various kinds, with an annual output of about \$50,000. The timber products have an output of about \$6,000 annually.

Asbestos is found in Clayton county.

Jonesboro, the county seat, 23 miles south of Atlanta on the Central of Georgia Railroad, is a thriving town, doing a good business and well supplied with churches and schools, and having a handsome court-house valued at \$25,000.

Lovejoy and Morrow are each prosperous little villages on the same railroad as Jonesboro. The Southern Railway also crosses the north-western part of the county, while another branch of the same railroad runs through its northeastern section. Thus by three distinct lines the people of Clayton county are brought into close touch with the city of Atlanta. Truck-farming should, for this reason, pay well.

Rex, on the Southern Railway, has an establishment which manufactures grain cradles, sash, blinds, wagons and other articles.

Some of the lands are very productive, especially on creeks and in valleys. The average yield to the acre of the staple crops is: corn, 13 bushels; seed cotton, 600 pounds; oats, 8 bushels; wheat, from 6 to 10 bushels.

It must be remembered that all these county averages include poor as well as good farming. The first-class farmers produce results far ahead of these figures.

According to the United States census of 1900 there were ginned in 1899, 9,345 bales of upland cotton.

Those who have paid attention to hay average more than 3,000 pounds to the acre, while some go far beyond that. All the grasses, such as Bermuda, crab, clover, orchard, red-top, timothy, blue and pea-vines, do well. A recent report showed among other products of the county nearly 7,000 bushels of cow-peas, 386 bushels of peanuts (ground-peas), 1,500 bushels of Irish potatoes, 26,600 bushels of sweet potatoes. There were in 1890, 8,253 pounds of honey, 451,214 gallons of milk, 157,905 pounds of butter, 285 pounds of cheese, poultry to the number of 47,027, and 76,281 dozens of eggs.

Of farm and other animals there were in 1890, 88 sheep, with a wool-clip of 154 pounds, 2,860 cattle, 77 being oxen, and 1,238 milch-cows, of which 317 are of improved breeds. There were also 352 horses, 1,064 mules, 4 donkeys and 2,688 swine.

The area of Clayton county is 142 square miles, or 90,880 acres. Population in 1900 was 9,598, an increase of 1,303 since 1890; school fund, \$6,436.79.

From the Comptroller-Generals report for 1900 we gather the following items: acres of improved land, 91,862; value per acre, \$8.25; city or town property, \$132,915; money, etc., \$92,963; merchandise, \$42,365; household furniture, \$66,311; farm and other animals, \$96,356; plantation and mechanical tools, \$30,561; watches, jewelry, etc, \$3,692; value of all other property, \$27,577; real estate, \$887,963; personal estate, \$396,950. Aggregate of whole property, \$1,284,913.

Property returned by colored taxpayers: acres of land, 1,624; value,

\$11,773; city or town property, \$3,200; merchandise, \$600.00; household and kitchen furniture, \$5,023; farm and other animals, \$7,375; plantation and mechanical tools, \$1,613; value of all other property, \$189.00. Aggregate of property, \$30,021.

The tax returns for 1901 show a gain of \$103,052 in value of property over the returns of 1900.

Peaches, apples, other fruits, berries, melons, and all kinds of garden vegetables do well. There are in the county about 22,000 apple and 58,000 peach-trees.

The vicinity of Jonesboro was the scene of fierce battles August 31st and September 1, 1864. Sherman, after trying in vain for more than six weeks to force his way into Atlanta, marched with his main army to the rear of the Confederates and threw a strong force across the Central Railroad, the last line of supply for Hood's army. General Wm. J. Hardee, being sent to dislodge him, was unable to do so, but by a desperate fight against tremendous odds, secured Hood's safe retreat from Atlanta.

In Clayton county the Baptists, Methodists, Presbyterians and Disciples or Christians, have good churches in town and county, the two first largely predominating.

There are 50 public schools in this county. In the 34 for whites there is an average daily attendance of 879, and in the 16 for negroes, an attendance of 263.

Although Jonesboro, the chief town, has only 877 inhabitants, the district of Jonesboro, which includes it, contains a population of 3,574.

Population of Clayton county by sex and color, according to the census of 1900: white males, 2,758; white females, 2,814; total white, 5,572; colored males, 2,041; colored females, 1,985; total colored, 4,026.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 22 calves, 48 dairy cows, 30 horses, 3 mules, 59 swine.

CLINCH COUNTY.

Clinch County was laid off from Ware in 1852 and was named for General Duncan L. Clinch, who in the war with the Seminole Indians in Florida was distinguished for gallantry at the battle of Withlacoochee, and was also a member of Congress from Georgia in 1843-45. Clinch is bounded by the following counties: Coffee on the north, Ware on the east, Echols on the south, and Lowndes and Berrien on the west. It is also bounded by Florida on the south.

The Allapaha river, a tributary of the Suwannee river, runs along its western boundary. The county is watered by several large creeks: Suwanoochee and its east fork, and Jones, tributaries of the Suwannee river; Reed Bluff and its north fork, tributaries of the Satilla.

Two branches of the Plant System of Railroads, the Atlanta, Valdosta and Western and a short branch railroad give travel and transportation facilities. Homerville, the county seat, located on the main

stem of the Plant System, is a pleasant town of about 434 inhabitants. Homerville district, which includes the town, contains a population of 1,039. Dupont district, including the town of that name, has a population of 1,032. This place has a large sugar refinery just completed. About five-sixths of this county is wooded, and the land is covered with virgin forests of yellow pine, cypress and live oak. On one tract of 51,000 acres there are 150,000,000 feet of pine. Some of the trees will afford 1,000 feet of lumber. The average cut of yellow pine varies from 2,000 to 30,000 feet to the acre.

Turpentine lands are generally leased for three years. Each tree will produce on an average one gallon of spirits of turpentine a year, valued at 40 cents a gallon, while the resin is valued at about the same.

After the timber has been cut off, there is no better crop for these lands than sugar cane. Some of them will produce 2,400 gallons to the acre, and they will average between 400 and 800 gallons to the acre.

The face of the country is level and the soil gray, well adapted to the growth of cotton, corn, sugar-cane, tobacco and potatoes. The cotton is of the long staple or sea-island variety and brings about double the price of the upland cotton. One acre, under ordinary cultivation, will produce 300 pounds of seed cotton (long-staple), which is worth double the price of upland. Other crops will average: corn, from 10 to 25 bushels; sugar-cane, 800 gallons to the acre; tobacco, 400 pounds and potatoes, 150 bushels.

The large number of acres of wild grass lands give splendid opportunities for raising, almost without cost, cattle, sheep and hogs for the market. There were in 1890, 2,927 sheep, with a wool-clip of 5,537 pounds; 11,337 cattle, 3,011 milch cows, 163 working oxen, 344 horses, 261 mules, 10,796 swine, 24,835 of all kinds of poultry. There was a product of 38,595 dozens of eggs, 20,584 pounds of honey, 140,858 gallons of milk, 8,538 pounds of butter, and 100 pounds of cheese. According to the United States census of 1900 there were ginned in the season of 1899-1900 only 592 bales of sea-island cotton.

The area of Clinch county is 1,077 square miles, or 689,280 acres. The population in 1900, 8,732. The school fund is \$4,992.90.

According to the Comptroller-General's report for 1900, there are: acres of improved land, 297,656; of wild land, 584,650 (an error by several thousand); value per acre of improved land, \$0.91; of wild land, 19 cents; city property, \$50,375; household furniture, \$63,520; of farm and other animals, \$186,395; plantation and mechanical tools, \$26,272; watches, jewelry, etc., \$4,717; money, etc., \$56,776; merchandise, \$55,405; value of all other property, \$64,533; real estate, \$438,252; personal estate, \$458,927; aggregate of all property, \$897,179.

Property returned by colored taxpayers: Number of acres of land, 5,288; value of same, \$6,692; city property, \$2,250; money, etc., \$122; household furniture, \$10,548; farm and other animals, \$4,686; plantation and mechanical tools, \$925; value of all other property, \$565; aggregate, \$20,000.

The tax returns for 1901 show an increase of \$38,113 in the value of all property over the returns of 1900.

The public schools of Clinch county number 37 for white and 9 for colored pupils. The average attendance is 1,100 white and 375 colored pupils.

The growing of pecans would prove a profitable industry in this county. There is one tree near Homerville which yields every year \$30.00 to its owner.

Population of Clinch county by sex and color, according to the census of 1900: White males, 2,681; white females, 2,461; total whites, 5,142; colored males, 2,292; colored females, 1,298; total colored, 3,590.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900, only 5 horses and 14 mules reported.

COBB COUNTY.

Cobb County was laid out from Cherokee in 1832 and named after Judge Thomas W. Cobb. The counties bounding it are: Bartow and Cherokee on the north, Milton on the east, Fulton on the east and southeast, a little edge of Campbell on the southeast, Douglas on the south, and Paulding on the west. The Chattahoochee runs along its eastern and southeastern border. The county is well watered by several creeks, the most important of which are Sweetwater, Nickajack and Soap. The very best of facilities are afforded by the following railroads: The Western and Atlantic (State road), running almost through the center of the county; two branches of the Southern System, traversing the southern and southwestern parts of the county, and the Atlanta, Knoxville and Northern, running northeasterly from Marietta.

This is one of the most favorably located counties in the State. Just north of Fulton county, it has both its own thriving little city of Marietta and the great city of Atlanta as home markets for the products of its fields and gardens. Besides it has close at hand for its factories the minerals and raw cotton of Bartow and Cherokee, and for its marble yards and finishing plant the marble of the splendid quarries of Pickens and Cherokee.

The soil is varied, being one of the types peculiar to the crystalline belt. Some of it is gray with mulatto subsoil, and well adapted for small grain. A large part is red land productive of cotton and corn. Clover and the grasses grow to perfection. Vegetables, fruits and berries are produced with such ease that, after they have afforded an abundant home supply, there is enough left for a good money crop. A dozen market gardens are in successful operation. The average yield to the acre is: Seed cotton, 750 to 1,200 pounds; corn, 15 to 30 bushels; oats, 25 to 30 bushels; wheat, 13 to 18 bushels; Irish and sweet potatoes, from 100 to 150 bushels; field peas, 18 to 25 bushels; sorghum syrup, 250 gallons; crab grass hay, 5,000 pounds; clover hay, from 5,000 to 6,000 pounds; peavine hay, from 2,000 to 3,000 pounds. Bermuda grass is used for

pasturage during six months of the year, crab grass four or five months and clover the year round. Of the fertilizers used 20 per cent. is produced on the farm, and one-half of the cotton seed raised is returned to the land as a fertilizer, either in the form of green seed or cotton seed meal. On some of the lands 50 bushels of corn and 40 of wheat to the acre are a common yield. On the dairy farms, of which there are 5, the favorite breeds are the Jersey and Shorthorn Durham, the latter being also one of the best beef breeds, to which some attention is being given. In 1890 there were in Cobb county 997 horses, 1,862 mules, 5 donkeys, 8,302 swine, 467 sheep, with a wool clip of 962 pounds; about 7,000 cattle, 2,800 milch-cows, and of poultry of all kinds, 130,847, producing about 181,592 dozen eggs. There were also produced 983,783 gallons of milk, 302,018 pounds of butter and 100 pounds of cheese, and about 21,289 pounds of honey. Three hundred acres are devoted to grapes and excellent wines are made.

Peach growing is becoming a great industry in Cobb county. Judge Gober, of Marietta, who owns large orchards in Cherokee and Pickens counties, has more than 100,000 peach trees in this county, besides apple-trees and many varieties of grapes.

The poultry industry of Georgia is being rapidly developed in this State, and numerous large plants, as well as small breeders, are furnishing a large amount of the very best food (poultry and eggs) to the steadily increasing population of Georgia, besides shipping great quantities to the Florida and Cuban markets. We see at all our county and State fairs, as well as our large expositions, that the poultry department is becoming one of the leading features. Liberal cash premiums are offered at these shows, and during the Atlanta Exposition of 1900, over four thousand birds were entered, and cash premiums aggregating \$2,000 were paid out in this department. The premiums this year have been increased, and we may expect a much larger show than last year. Every city of note in Georgia has its annual poultry show, which has done much to educate and stimulate our people to one of America's greatest farm productions, it being exceeded by only one industry in actual value. The cattle products stand first, and poultry and eggs come next. One can be fully impressed with the possibilities in Georgia, and find out something of its workings, by a visit to Belmont Farm, Smyrna, Cobb county, Georgia, near Atlanta, where can be seen one of the most complete plants in the world. This plant is incorporated under the laws of Georgia with a capital stock of \$40,000 all paid in, \$50,000 having already been expended on this farm of two hundred acres, where you will find all the leading varieties of chickens, ducks, turkeys, geese, pheasants, pet stock Jersey cattle, and Berkshire hogs of the most noted American and imported families. We see stock being developed here, that we believe to be the equal of any in the United States. It is not only a treat, but an object lesson, and every one interested in this should make it a point to visit and study the workings of this plant and farm. Col. Ed. L. Wight, member of the present House of Representatives, and one of the most successful business men in Georgia, is president of this

plant, with his son, Ed. L. Wight, Jr., vice-president and general manager, and Mr. Loring Brown, one of Georgia's old poultry fanciers, general superintendent. On this plant can be seen thousands of the finest thoroughbred fowls, and a large two-story, six hundred-foot incubator and nursery, where for twelve months of the year twenty of the largest size Prairie State Incubators are constantly in operation, turning out seven thousand little chicks every three weeks. After being hatched they are systematically worked through seventy rooms—one room each day, that are properly heated to the required degree of temperature. They are fed on the best and most wholesome balanced ration, and with plenty of warmth and proper food these thousands of little ones are turned out a finished article, ready for market, at sixty to seventy days from the time they leave the incubator. Another paying industry of this plant is the large amount of fresh Leghorn eggs that are shipped to market each day, every egg stamped and guaranteed fresh, for which are received from five to ten cents over the highest market price for every one they have been able to produce. Plymouth Rocks are principally used for the broilers, as they have proven to be the quickest growers and most profitable to turn food into money in the shortest possible time. It is useless to say that this plant is a paying investment, for we believe from what we have seen and can learn, that it will prove to be one of the most profitable industries conducted in the State. This is the largest plant of its kind in Georgia, but there are numerous other smaller ones equally as profitable.

We especially invite the farmers and all interested to give this business a more careful study and more attention, as we believe it to be one of Georgia's most profitable resources.

On another page of this book will be found a cut representing a Berkshire boar, owned by Belmont Farm, near Smyrna, Georgia. This boar represents a type of hogs that after years of experimenting by the best breeders of the South, have proven to be by far the best sort for this section of the country. They are healthy, easily kept and good foragers; and, when put in a pasture, they will make their own living and grow fat, where other breeds will not thrive. To illustrate what can be done with hogs in Georgia: the president of the company owning Belmont Farm states that from twelve Berkshire sows he has this year sold over \$2,000 worth of pigs, at an expense of not exceeding \$500.00 for labor and feed, leaving a net balance of about \$1,500 in favor of the farm. Several of the sows were imported from England and the balance are American bred. Two of the former cost a little over \$300.00 besides freight. The raising of hogs is an industry that should receive more attention from the farmers of the State than has been the case heretofore. The price of meat is very high and likely to remain so for some years to come; yet a farmer with a few Berkshire hogs could produce enough meat at a very small cost to supply his own family and farm, thereby saving the money obtained from other crops, that he would otherwise have to use in buying his meat.

Georgia is a country in which Bermuda grass, burr-clover, rye, sweet

potatoes, peas and other crops can be produced at a comparatively small cost, and each of these can be utilized in raising hogs.

This Department feels that there is no industry that the farmers of the State can follow, that will bring the same returns for the money invested as the raising of hogs will. A visit to Belmont Farm will convince the most sceptical that we are right in urging this upon our people. They can see how easily it can be done and how profitably.

To illustrate the difference between the better breeds of hogs and those that people generally raise: the manager of Belmont Farm stated that about a year ago he had two pigs of practically the same age, one being a pure bred Berkshire and the other fairly good specimen of the common hog of the country; he put them in the same pen, fed them precisely alike, and at the end of several months, after they had become fat enough to kill, they were slaughtered and carefully weighed. The common hog weighed 167 pounds, the other, 283 pounds, thus giving an advantage to the thoroughbred hog of over 100 pounds, which was worth at least from \$7.00 to \$8.00. This would mean that a man having twenty-five hogs to kill would save \$200.00.

The people of this State are fast realizing the necessity of diversifying their crops and products, and, while doing so, they should secure the very best stock, from which to produce the good results that they hope for.

The beautiful city of Marietta, 1,100 feet above sea level, noted as a health resort and for the excellent character of its population, is the county site. It is blessed with pure water and a delightful climate. It has a thrifty population, which in 1900 numbered 4,446 in the corporate limits, and 7,814 in the entire Marietta district; does a fine business, possesses an excellent school system, good hotels, successful mercantile establishments, prosperous manufactories of various kinds, and adequate banking facilities. It is lighted by electricity, has the largest chair factory and largest paper mill in the State, four marble yards and a large plant for finishing marble. There is also a canning factory, a creamery and a knitting mill, a foundry and machine shop. The courthouse is valued at \$40,000. In the northeastern part of the county on a branch of the Southern Railway, is the manufacturing town of Roswell with a population of 1,329. The water powers of the Chattahoochee are here utilized in two large cotton factories, one of which uses steam also. The Laurel Mills Manufacturing Company operate a woolen factory, run by water, which makes jeans, cassimeres and tweeds. Here is also a wagon and harness factory.

At Nickajack, in the southwestern part of the county, on the Southern Railway, are the Concord Woolen Mills, using both water and steam.

In the southwestern part of Cobb, on the Southern Railway, is the town of Austell, with a population of 648. The entire Austell district contains 1,017 inhabitants. On the same railway about five miles northwest of Austell, is the town of Powder Springs, which derives its name from its mineral springs, which are highly impregnated with sulphur and magnesia. The Powder Springs district has 2,017 inhabitants, of which 280 live in the town.

Acworth, a thriving town of 937 inhabitants, is on the Western and Atlantic Railroad in the midst of a fine mineral and agricultural country. It has a large flouring mill, a chair factory and variety works for turning out mantels, wheelbarrows, etc. The whole Acworth district has 2,294 people.

The other towns in the county are Kennesaw and Smyrna. The former is located in the Big Shanty district and has in its corporation 320 of the 1,399 people who live in the district. The latter is in the Smyrna district and has in its corporate limits only 238 of the 1,185 people of the district. Both these towns are on the Western and Atlantic Railway. All the towns of Cobb county have good schools, and the leading Christian denominations supply them with churches.

In Marietta there is a large national cemetery, beautifully laid out and well kept. In it lie buried 10,000 Federal soldiers, who lost their lives south of the Etowah in the campaign between Sherman and Johnston in 1864. In full view of Marietta stands double-peaked Kennesaw Mountain, from whose summit there is spread out before the eye of the beholder a comprehensive view of the country over which for six weeks the Union and Confederate armies met in daily combat. On Pine Mountain fell General Leonidas Polk, while he, with Generals Johnston and Hood, were reconnoitering the enemy's position. Kennesaw Mountain was itself the scene of constant skirmishing and minor combats until the 27th of June, when Sherman's grand assault met disastrous repulse at every point. Of this battle General Sherman, the Federal commander, said: "We failed, losing 3,000 men to the Confederate loss of 630."

About one-third of Cobb county is timber land. In its forests are found yellow and white hickory, post and red oak, maple, ash and some short-leaf pine. The average price of lumber is \$8.00 a thousand feet.

Some gold and copper are found in Cobb county, the eastern portion of the Carroll county gold belt, extending through its northwestern corner. Some of the veins are one and a half miles east of Acworth and others seven miles south of the same town near Lost Mountain.

The streams are tolerably well supplied with fish.

The principal game of the county is quail and wild turkeys, of which the former are very plentiful, the latter not as abundant as in former years.

Nearly one-half the land under cultivation in Cobb county is devoted to cotton. By the United States census of 1900 there were ginned 14,979 bales, which approximates closely the production of the cotton.

The schools belonging to the excellent system established by the State number 65 for white pupils, with an average attendance of 2,144, and 32 for colored pupils with an average attendance of 936. According to the report of the State School Commissioner, the school fund for Cobb county is \$13,385.23.

The population, according to the United States census for 1900, was 24,664, an increase of 2,378 over that of 1890. The area is 341 square miles, or 218,240 acres.

By the Comptroller-General's report for 1900 the following are the

returns made for taxation: Acres of improved land, 186,817; of wild land, 921 acres; average value per acre of improved land, \$9.32; of wild land, \$2.48; city or town property, \$1,359,720; shares in bank, \$70,250; money and solvent debts, \$54,510; merchandise, \$239,915; stocks and bonds, \$59,500; cotton factories, \$207,345; iron works, \$8,700; value of household and kitchen furniture, \$212,915; value of farm and other animals, \$227,980; plantation and mechanical tools, \$70,850; watches, jewelry, etc., \$18,070; value of all other property, \$75,600; real estate, \$3,104,795; personal estate, \$1,734,955; aggregate value of whole property, \$4,823,765.

Property returned by colored taxpayers: Number of acres of land, 6,602; value of the same, \$49,270; city or town property, \$71,410; money and solvent debts, \$500; merchandise, \$800; household and kitchen furniture, \$9,815; watches, jeyerly, etc., \$230; farm and other animals, \$12,985; plantation and mechanical tools, \$2,660; value of all other property, \$280; aggregate value of all property, \$147,950.

The tax returns for 1901 show an increase of \$164,505 in the value of all property over the returns of 1900.

In addition to the regular passenger trains on the Western and Atlantic Railroad, an accommodation train between Marietta and Atlanta brings the two places so close together that many citizens of Marietta go daily to their business offices in Atlanta.

Population of Cobb county by sex and color, according to the census of 1900: White males, 8,574; white females, 8,760; total white, 17,334; colored males, 3,599; colored females, 3,731; total colored, 7,330.

Population of the city of Marietta by sex and color, according to the census of 1900: White males, 1,222; white females, 1,294; total whites, 2,516; colored males, 864; colored females, 1,066; total colored, 1,930.

Total population of city, 4,446.

Domestic animals in barns and inclosures, not on farms or ranges, in Cobb county, June 1, 1900: 134 calves, 35 steers, 4 bulls, 432 dairy cows, 347 horses, 40 mules, 6 sheep, 603 swine, 3 goats.

COFFEE COUNTY.

Coffee County was laid off in 1854 out of Irwin, Telfair and Appling. It was named for General John E. Coffee, who had served with great credit in the war of 1812-15, and was afterwards a representative from Georgia in the Congress of the United States (1833-1835). It is bounded by the following counties: Telfair on the north, Appling and Ware on the east, Clinch on the south and Berrien and Irwin on the west. It is watered by the Satilla river and its tributaries, Seventeen Mile Creek, Hog Creek, Big Hurricane and Little Hurricane Creeks. The Ocmulgee also runs along its northern border, and together with some of its tributaries waters that part of the county. Fish are plentiful in the streams.

One of the branches of the Plant System of Railways crosses the southern part of the county. The Waycross Air Line connects Douglass, the county site, with the growing city of Waycross in Ware county.

A little to the north of this road the Brunswick and Birmingham Railway crosses the county. Altogether there are about 90 miles of railroad in Coffee county and 30 miles of steamboat transportation on the Ocmulgee river. The public roads are being worked under the system provided by the State law.

The lands of this county are gray, except on the borders of the rivers. The productions are cotton, corn, sugar-cane, potatoes and melons. With proper attention peaches do well, and several small vineyards yield grapes of the most luscious varieties.

With good cultivation the average yield per acre of the staple crops is: Sea-island cotton, 1,000 pounds; corn, 30 to 40 bushels; sugar-cane, 400 gallons of syrup; Irish potatoes, 75 bushels; sweet potatoes, 200 bushels; crab grass and peavine hay, 4,000 pounds. The lands possess great advantages for peach growing. Pears yield abundantly when not affected by blight.

Market gardens can be run very profitably in this county, supplying early vegetables, strawberries and melons of fine quality.

About one-third of the original yellow pine timber is still standing, and unlimited quantities of hard wood timbers of various varieties in the swamps have not yet been touched. Among these are hickory, gum, the varieties of oak, cypress, etc. The annual output is 100,000,000 superficial feet, selling on the average at \$10 a thousand feet. The lumber is being cut by six large sawmills, averaging 60,000 feet a day. A dozen or more smaller mills saw about 10,000 feet a day. All these mills are operated by steam. In close connection with the lumber business are 36 turpentine distilleries. The county enjoys an extensive trade in lumber, rosin and turpentine.

The great area still covered by the piney woods gives to the county a good range for sheep, hogs and cattle, in the raising of which there is little expense and much profit. Among the pure bred cattle that have been introduced Jerseys and Holsteins are the favorite cows for butter and milk. Of the 19,489 cattle reported in the census of 1890 there were 509 working oxen and 4,622 milch-cows. By the same census there were 31,212 sheep, with a wool-clip of 66,860 pounds; 52,327 domestic fowls of all kinds, 24,357 swine, 645 horses, 878 mules and 2 donkeys. Some of the farm products were 155,508 gallons of milk, 10,674 pounds of butter, 13,568 pounds of honey and 54,029 dozens of eggs.

There are numerous grist mills in Coffee county.

According to the census of 1900 there were ginned 3,350 bales of sea-island and 19 bales of upland cotton of the crop of 1899.

There are three towns in Coffee county, Douglas, Willacoochee and Pearson, each located in a militia district bearing the name of the town. The population of each of these districts and towns is as follows: of Douglas district, 2,367, and of the town, 617; of the Willacoochee district, 2,754, and of the town, 471; of the Pearson district, 2,307, and of the town, 336.

Douglas, the county site, on the Waycross Air Line Railroad, has a new brick court-house valued at \$20,000, and a new jail, also of brick,

which cost \$8,000. It has a bank with a capital of \$30,000, and the new brick building of the Southern Normal Institute, erected at an expense of \$6,000, one of the best schools of its kind in Georgia.

Willacoochee and Pearson are both located on the Brunswick and Western Railroad, one of the lines belonging to the Plant System.

The Methodists and Baptists are the leading Christian denominations and have live churches and flourishing Sunday schools in every town and in nearly every neighborhood.

The schools of Coffee county belong to the public school system of Georgia. There is an average attendance of 1,274 in the 61 schools for whites and of 911 in the 26 schools for negroes. The report of the State School Commissioner for 1900 gives the assessment of Coffee county for school purposes as \$8,843.27.

The population of the county by the United States census of 1900 was 16,169, a gain of 5,686 over that of 1890. The total land area is 1,123 square miles, or 718,720 acres.

In the report of the Comptroller-General for 1900 are given the following returns for taxation: Acres of improved land, 530,906; of wild land, 173,324; average value per acre of improved land, \$1.35; of wild land, \$0.40; value of city or town property, \$84,596; shares in bank, \$19,675; money and solvent debts, \$342,175; merchandise, \$105,557; tonnage, \$200; cotton factories, \$33,500; household and kitchen furniture, \$100,169; value of farm and other animals, \$333,644; plantation and mechanical tools, \$44,349; watches, jewelry, etc., \$6,378; value of all other property, \$419,617; real estate, \$907,701; personal estate, \$1,408,848; aggregate value of whole property, \$2,316,549.

Property returned by colored taxpayers: Number of acres of land, 27,656; value of land, \$36,977; city or town property, \$2,276; money and solvent debts, \$4,905; merchandise, \$100; household and kitchen furniture, \$12,914; watches, jewelry, etc., \$489; farm and other animals, \$19,010; plantation and mechanical tools, \$3,070; value of all other property, \$2,847; aggregate value of whole property, \$82,588.

The tax returns for 1901 show a gain of \$154,026 in the value of all property over the returns of 1900.

Population of Coffee county by sex and color, according to the census of 1900: White males, 4,988; white females, 4,570; total whites, 9,558; colored males, 3,657; colored females, 2,954; total colored, 6,611.

Domestic animals in barns and inclosures, not on farms or ranges, in Coffee county, June 1, 1900: 14 calves, 10 steers, 1 bull, 11 dairy cows, 22 horses, 5 mules, 56 swine.

COLQUITT COUNTY.

Colquitt County, created from Irwin and Thomas in 1856, was named in honor of Walter T. Colquitt, a native of Virginia, who came with his parents to Georgia and settled in Hancock county. He went to school to Dr. Beman at Mount Zion Academy; then was at Princeton College and later studied law at Milledgeville. He was elected judge of the Chattahoochee circuit at the age of 27. He served Georgia in the Fed-

eral House of Representatives in 1838 and became United States Senator in 1842. He died in 1855.

Colquitt county is bounded by the following counties: Worth on the north, Berrien on the east, Brooks and Thomas on the south, Thomas and Mitchell on the west. Little River, a tributary of the Withlacoochee, forms its eastern boundary. This and the numerous creeks which water the county supply the people with fish. Moultrie, the county site, is at the junction of three railroads, the Sparks, Moultrie and Gulf, the Georgia Northern, the Tifton, Thomasville and Gulf. It is situated between two creeks, the Ochlochnee and Ocopilco. Other streams in the county are Tyty, Indian and Bridge Creeks. The face of the country is generally level. The soil is gray and in most places sandy, but much of it is rich, loamy and dark, with clay foundation. According to location and culture the lands will yield per acre: Corn 8 to 20 bushels; oats, 10 to 20 bushels; Irish potatoes, 50 bushels; sweet potatoes, 150 to 200 bushels; field-peas, 10 bushels; ground-peas, 35 bushels; upland seed cotton, 750 pounds; sea-island seed cotton, 500 pounds; corn fodder, 300 pounds; sugar-cane syrup, 250 to 300 gallons; about 1,500 tons, or 3,000,000 pounds of hay per annum are obtained from native grasses. Melons and grapes do splendidly, and grape culture is being largely introduced. There is one vineyard of 25 acres. Much of the land will produce one bale of cotton to the acre. The timber is mostly long-leaf pine. Hence there is considerable business in lumber, rosin and turpentine, shipments of which are made to Savannah and Brunswick. There are 20 steam sawmills, with an annual output of 40,000,000 superficial feet of lumber, averaging \$7 a thousand. The large area of wild lands, with their thick carpet of native grass, makes stock raising a profitable business. By the census of 1900 there were 15,407 sheep, with a wool-clip of 29,189 pounds; 10,009 cattle, 1,791 milch-cows, 177 working oxen, 28,000 swine, 200 goats, 26,000 poultry, 442 horses and 357 mules. There are in the county 5 donkeys. There was a production of 42,000 dozens of eggs, 6,000 pounds of honey, 73,665 gallons of milk and 6,343 pounds of butter. There are three dairy farms, whose products are disposed of in the town of Moultrie. The Jersey is the favorite on these farms. All the butter and milk are consumed in the county. This is also true of the poultry and eggs.

Considerable tobacco is grown in Colquitt county and the authorities of the Tifton and Moultrie Railroad are making efforts, which they think will be successful, to get the freight rates to various points in Georgia, the Carolinas and Virginia reduced from \$1.25 to 65 cents per hundred-weight.

Mr. Robert Davis, a native of South Carolina, now a citizen of Colquitt county, during the season of 1901 raised on six acres of what is considered poor land, between three and four thousand pounds of tobacco at an average of fourteen cents a pound.

Population in 1900, 13,636; school fund, \$5,734.36.

Area of Colquitt county, 565 square miles, or 461,600 acres.

By the Comptroller-General's report for 1900 there are: Acres of

improved land, 305,286; of wild land, 65,505; average value per acre of improved land, \$1.76; of wild land, \$1.12; city or town property, \$223,671; shares in bank, \$25,300; money, etc., \$181,102; value of merchandise, \$119,864; stocks and bonds, \$6,712; cotton manufactories, \$9,267; iron works, \$500; household furniture, \$87,521; farm and other animals, \$214,267; plantation and mechanical tools, \$36,421; watches, jewelry, etc., \$6,467; value of all other property, \$264,761; real estate, \$832,496; personal estate, \$955,444; aggregate of entire property, \$1,787,940.

Property returned by colored tax-payers: Number of acres of land, 167; value, \$490; city or town property, \$1,152; money, etc., \$150; household and kitchen furniture, \$2,657; watches, etc., \$154; farm animals, \$1,140; plantation and mechanical tools, \$164; value of all other property, \$316; aggregate, \$6,223.

The tax returns for 1901 show an increase of \$645,631 in the value of all property over the returns for 1900.

The people are provided with good schools, and with churches of the leading Christian denominations. Colquitt county is blessed with a hospitable, moral, temperate and industrious people. At Moultrie there is a flourishing new cotton mill with a capital stock of \$100,000. Other manufactories are: An ice factory, water works and electric lights, the two latter plants being owned by the city of Moultrie; one iron foundry, worth \$2,500; one railroad workshop, belonging to the Tifton, Thomasville and Gulf Railway, employing about 50 men; one wagon and buggy factory, valued at \$4,000; one barrel factory, valued at \$6,000. There are 20 turpentine distilleries in the county, employing 2,000 hands, shipping 20,000 casks of spirits of turpentine, each containing 50 gallons, and 75,000 barrels of rosin; 10 grist mills in the county for home use, and the 20 steam sawmills previously mentioned.

The Blanchard Land and Lumber Manufacturing Company will build during 1901 a syrup and sugar mill and new sawmills.

The court-house at Moultrie is valued at \$20,000, and the jail at \$5,000.

In addition to the railroads there are some 30 or 40 miles of tramways for saw-mills. The county roads are in good condition.

According to the United States census of 1900 the cotton ginned for season of 1899-1900 was 1,785 bales of upland and 2,562 bales of sea-island cotton. The receipts and shipments from the entire county are about 4,500 bales, about two-thirds being sea-island. About 4,000 of these were handled at Moultrie. Some of the products of the county are marketed at Albany, Pelham and Thomasville, but most of them at Moultrie. There are in Moultrie 3 banks with an aggregate capital of \$70,000; several fine mercantile establishments and life and fire insurance agencies. The 38 schools for whites have an average attendance of 1,198, and the 11 for colored have an average attendance of 289.

The population of Colquitt county, which in 1890 was 4,794, has, according to the census of 1900, increased to 13,636, a gain in the last

ten years of 8,842. The population of district 1151, including the town of Moultrie, and known as Moultrie district, is 3,493. The population of the town of Moultrie is 2,221.

Population of Colquitt county by sex and color, according to the census of 1900: white males, 5,234; white females, 4,800; total white, 10,034; colored males, 2,046; colored females, 1,556; total colored, 3,602.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 2 calves, 20 steers, 4 dairy cows, 8 horses 89 mules, 8 swine.

COLUMBIA COUNTY.

Columbia County was laid out from Richmond in 1790, and was named for Christopher Columbus, the discoverer of America. It is bounded by the following counties: Lincoln on the northwest, Richmond on the southeast and McDuffie on the southwest. The State of South Carolina bounds it on the northeast and is separated from it by the Savannah river. Little River separates it from Lincoln county. It is watered by several creeks, among which the most important are Uchee, Big and Little Kiokee, Greenbriar and Germany.

The climate is pleasant and healthful. Several cases of longevity might be given. One of them was a Mr. David Hodge, who at the age of 102 married a Miss Elizabeth Bailey, aged 40 years. Captain Thomas Cobb, a successful agriculturist, who managed his farm for nearly 90 years, was 110 years old at the time of his death.

Appling, the county site, is 23 miles from Augusta, and about 12 or 13 miles by wagon road from Harlem on the Georgia Railroad. Two and a half miles from Appling was located Carmel Academy, where Dr. Moses Waddell, afterward president of the State University, assisted by W. H. Crawford, in 1794 taught John C. Calhoun, the famous South Carolina Senator, and Thomas W. Cobb, afterwards Representative and Senator from Georgia. The town of Appling was named in honor of Colonel Daniel Appling, a native of Columbia county, who at the age of 18 entered the army of the United States and was distinguished in several engagements during the war of 1812-1815. He died in 1818, in which year a new county was laid out and named for him. The most thriving towns in the county are Harlem and Grovetown, on the Georgia Railroad, which have a population of 527 each, and enjoy a considerable trade. Harlem has a flourishing manufacturing establishment where doors, sashes, blinds, wagons and plowstocks are made. Other places on the Georgia Railroad are Forrest, Berzelia and Saw Dust. The county has also water transportation by pole boats on the Savannah river to Augusta. In the Savannah river great quantities of fish are caught for the Augusta market. There are five flour and grist mills run by water-power and six steam sawmills. Besides the Georgia Railroad in the southern part of the county the Charleston and Western Carolina runs

through the eastern section. The wagon roads are in good condition, and are worked by the new road law.

The face of the country is broken. The inhabitants are intelligent and hospitable, and before the civil war there was much wealth in the county. The soil of two-thirds of the land is red clay. In the pine lands of the southern part of the county the soil is sandy with clay sub-soil. On the river the lands are fertile and produce good crops of cotton, corn, sugar-cane, potatoes, melons and peas. Though some of the lands are much worn from bad tillage, intelligent cultivation is in many places restoring its fertility. The average yield per acre is: Seed cotton, 600 pounds; corn, 14 bushels; wheat, 12 bushels; oats, 20 bushels; rye and barley, 10 bushels each; peas, 10 bushels; Irish potatoes, 100 bushels; sweet potatoes, 150 bushels; sugar-cane, 300 gallons of syrup; sorghum cane, 200 gallons of syrup. It is well suited to all the forage crops. Red clover, lucern and vetches do well when properly put in in the fall. These lands make fine peavine hay after wheat, oats and rye. Velvet beans also make excellent forage and are very useful as renewers of the soil. Peaches grow well, as do also an endless variety of vegetables. About 3,000 acres are devoted to raising melons for the market, the net profit on which is about \$25 an acre. According to the United States census of 1900 the cotton ginned for the season of 1899-1900 was 9,354 bales of upland.

There are four dairy farms which make butter for the Augusta market. Jerseys and Devons are the favorite cows. The butter products of the county amounted in 1890 to 63,174 pounds, and the milk to 221,775 gallons. Other products were 12,345 pounds of honey and 67,249 dozens of eggs. By the census of 1890 there were 428 sheep, with a wool-clip of 977 pounds; 2,856 cattle, 1,226 milch-cows, 100 working oxen, 615 horses, 1,033 mules and 5,364 swine, and 45,499 poultry of all kinds.

Much attention is paid to education. In every neighborhood are Methodist and Baptist churches. There are also some Christians of other denominations.

The area of Columbia county is 306 square miles, or 195,840 acres.

Population in 1900, 10,653, a loss of 628 since 1890; school fund, \$7,290.98. By the Comptroller-General's report there are: acres of improved land, 180,199; average value, \$3.05 an acre; city or town property, \$59,660; money, etc., \$19,321; value of merchandise, \$15,895; stocks and bonds, \$25,500; household and kitchen furniture, \$29,787; farm and other animals, \$75,769; plantation and mechanical tools, \$15,075; watches, jewelry, etc., \$1,610; value of all other property, \$17,559; real estate, \$611,547; personal estate, \$202,887; aggregate, \$814,434.

Property returned by colored taxpayers: Number of acres, 6,119; value of same, \$18,825; city or town property, \$575; household and kitchen furniture, \$3,042; farm and other animals, \$17,463; plantation and mechanical tools, \$2,873; value of all other property, \$1,042; aggregate of all property, \$43,875.

The tax returns for 1901 show an increase of \$71,884 in value of all property since 1900.

There are 23 schools for white and 23 for colored pupils, the average attendance on the white schools being 531 and on the colored 911.

Population of Columbia county by sex and color, according to the census of 1900: white males, 1,482; white females, 1,418; total white, 2,900; colored males, 3,873; colored females, 3,860; total colored, 7,753.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 5 calves, 24 dairy cows, 13 horses, 4 mules, 2 donkeys, 24 swine.

COWETA COUNTY.

Coweta County was laid out in 1826. A part was set off to Campbell in 1828 and a part to Heard in 1836. It is bounded by the following counties: Campbell on the north, Fayette on the east, Meriwether and Troup on the south, Heard on the west and Carroll on the northwest. It derives its name from an Indian tribe that once lived in that section of the State. It is watered by the Chattahoochee river and its tributaries and by tributaries of the Flint. The people are intelligent and progressive, and are engaged in many lines of industry—farming, fruit growing and manufacturing. All the leading Protestant denominations are represented in the numerous churches in town and country. Besides the public schools there are many private schools.

Newnan, the county seat, with a population of 3,654, one of the strongest of the smaller cities of Georgia, has all the conveniences of a modern city—electric lights, an ice plant, water works, good sewerage, fire department, an excellent public school system, and elegant churches. Here two railroads, the Central of Georgia and the Atlanta and West Point, intersect, giving excellent passenger and freight service. With the use of local capital alone Newnan has established factories which give employment to more than 1,000 people, and pay out annually several hundred thousand dollars in wages. The Newnan Cotton Mill, established in 1888 with a capital of \$70,000, now represents \$300,000 and employs 400 operatives. It has made annually 25 per cent. for the past four years. Another enterprise of this sort is the Lodi Cotton Mill, representing a capital of \$50,000. The city has also a large cotton seed oil-mill, a guano factory, an ice factory, an iron foundry and railroad machine shops, a cigar factory, a wagon and buggy factory, a tannery and harness shop, a canning factory and a shoe factory. The R. D. Cole Manufacturing Company makes engines, boilers, sawmills, grist-mills, power-presses, shafting, etc. The orders on this company for boilers alone aggregated in 1900 several hundred thousand dollars. The annual product of the Coweta Fertilizer Company averages 15,000 tons. The large flouring mill runs day and night to satisfy the demand for its product. The two banks of Newnan have an aggregate capital of \$250,000. Fire and life insurance agencies

do a large business at Newnan and in the other towns of the county. The district which includes the city of Newnan had 5,375 inhabitants by the census of 1900.

The town of Grantville, which contains a population of 769, is on the Atlanta and West Point Railroad and in the district of the same name whose total population in 1900 was 1,884. In this town are two grist mills, a public ginnery and a hosiery mill which employs 50 hands and makes 2,000 dozen pairs of hose in a week. There are Methodist and Baptist churches and good schools.

Senoia, on the Central of Georgia Railway, had in 1900 a population of 782 in its corporate limits and in its entire district 2,290 people. There are here a cotton factory, grist mill, a public ginnery, a bank with a capital of \$25,000, good schools and churches of the Methodists and Baptists.

Sharpsburg and Turin are other towns on the Central of Georgia Railway, at each of which are a grist-mill and several ginneries. The district, including Sharpsburg, contained 2,414 people in 1900, of whom 137 dwell in the corporate limits. The Turin district contains 879 people, of whom 196 have their homes in the town. Both these towns are supplied with schools and churches.

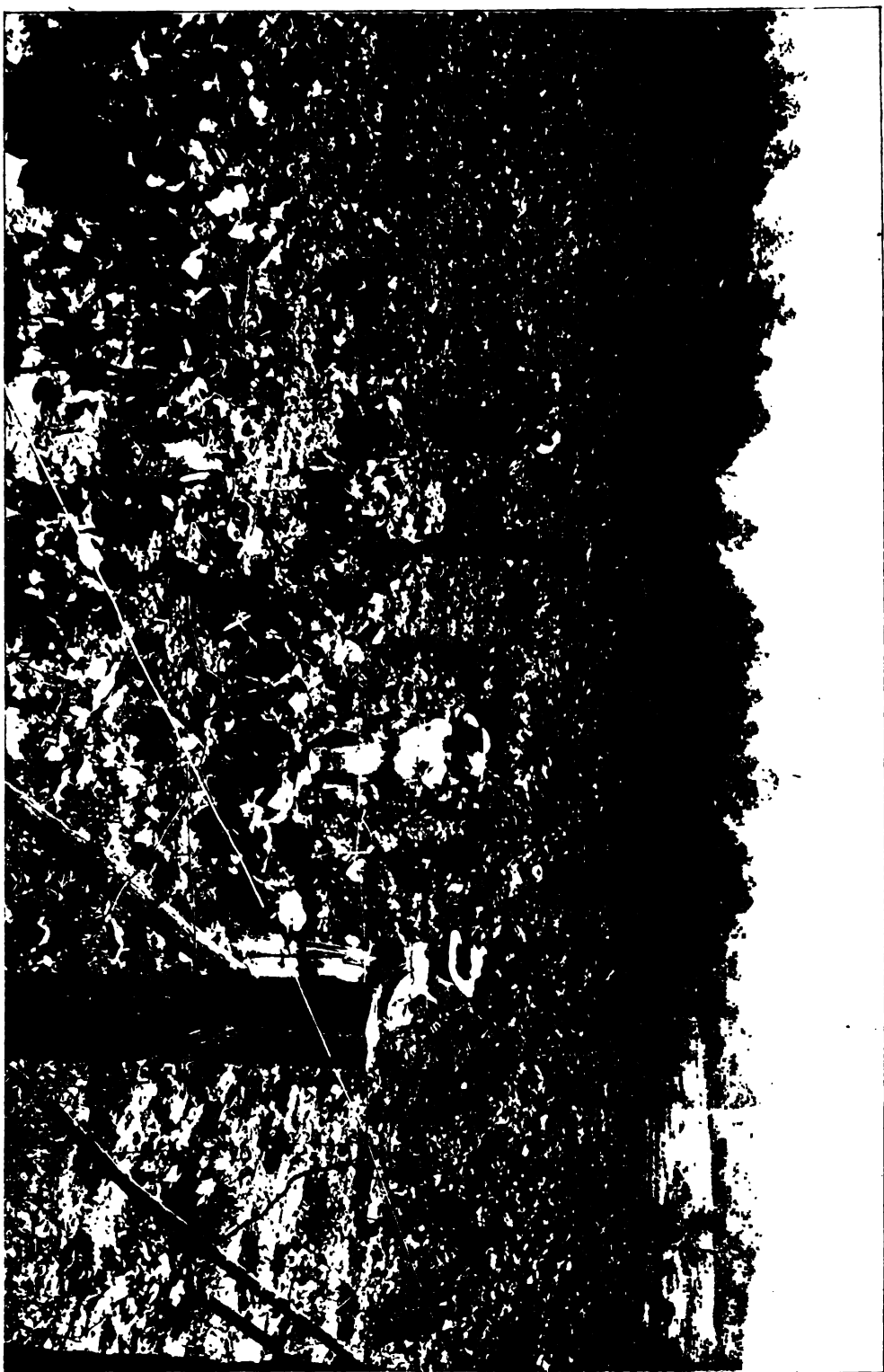
The second militia district of Coweta county, which in 1900 had 2,981 inhabitants, includes two towns, Moreland, with 229 people in its corporate limits, and St. Charles, with 66. At Moreland there are a crate and basket factory, two ginneries, a sawmill, a grist-mill and a general repair shop for wood and iron work. St. Charles also has a public ginnery and good orchards near by. Of course there are churches and schools at these towns. Moreland and St. Charles are a short distance apart on the Atlanta and West Point Railroad.

The Sargent factory is to the northwest of Newnan on the Central of Georgia Railway.

At Powellsville, on the Atlanta and West Point Railroad, are two churches, a good school, two flourishing stores, a public ginnery, where 1,200 bales of cotton are ginned annually, and within a radius of a mile more than 40,000 grape vines are in bearing. Though Powellsville contains only 79 people, the Cedar Creek district, which includes it and for which it is a shipping point, had 1,150 inhabitants in 1900.

The fruit industry of Coweta county is steadily growing, and several thousand acres are devoted to peaches, grapes and strawberries. The largest fruit farms are in the districts in which are located Newnan, Moreland, Senoia, Turin, Powellsville and Coweta. At the last named place, nine miles east of Newnan, a company of Newnan gentlemen have 125 acres planted in peaches and an equal number in grapes. Here is located one of the most complete wineries in the South, known as Vina Vista, having a capacity of 100,000 gallons of wine in a season. Excellent fruit lands can be bought in this county at from \$8 to \$50 an acre, according to degree of improvement or proximity to one of the larger towns.

Coweta county has excellent mineral resources. Immense beds of



GRAPE VINEYARD.

granite of a superior quality are found in the vicinity of Newnan, and near Grantville are mines from which gold is obtained in paying quantities. Two miles from Grantville is the Wilkes gold mine, operated by Boston capitalists, equipped with modern machinery and producing a good output.

The character of the soil of Coweta county varies from a light loam to a heavy clay. Taking all lands, good and bad, the average production to the acre of the various crops is: Seed cotton, from 600 to 800 pounds; corn, 10 bushels; wheat, from 8 to 10 bushels; oats, 11 bushels; sugar cane, 100 gallons; sorghum cane, 200 gallons; Irish potatoes, from 50 to 100 bushels; sweet potatoes, from 100 to 150 bushels. On the best lands and under the best methods of culture, the production is frequently 1,500 pounds of seed cotton (equivalent to 500 pounds of lint or one bale) to the acre, 30 or more bushels of wheat to the acre and other crops in like proportion.

The forage crops are peavine hay, sorghum, millet, common fodder and shredded corn. Bermuda grass furnishes the principal hay crop, of which the average is 3,000 pounds to the acre, though much more is produced on many farms. By the census of 1890 there were in Coweta county 437 sheep, with a wool-clip of 684 pounds; 6,224 cattle, of which 307 were working oxen and 2,541 were milch-cows; 903 horses, 2,827 mules, 2 donkeys, 7,778 swine and 119,485 of all kinds of poultry. The county produced, by the same census report, 175,060 dozens of eggs, 28,075 pounds of honey, 811,186 gallons of milk and 237,287 pounds of butter.

Between 40,000 and 50,000 bales of cotton are shipped annually, the largest proportion being from Newnan. According to the United States census of 1900 the cotton ginned in the county was 24,680 bales upland, which represented very nearly its cotton production.

Magnificent water-powers are located on the Chattahoochee, eight miles west of Newnan. Of the dozen or more sawmills of the county the large majority are operated by steam.

The area of Coweta county is 443 square miles, or 283,520 acres.

The population in 1900 by the United States census was stated to be 24,980, a gain of 2,626 over that of 1890.

By the report of the State School Commissioner for 1900 the school fund for the county was stated as \$14,551.61, in addition to which for the city of Newnan a special fund of \$2,059.60 was assessed.

The following returns and valuations are given in the report of the Comptroller-General for 1900: Acres of improved land, 266,937; average value of improved land, \$5.68 an acre; value of city and town property, \$1,001,903; shares in bank, \$206,675; money and solvent debts, \$640,137; merchandise, \$189,132; stocks and bonds, \$68,752; cotton manufactories, \$371,679; value of household and kitchen furniture, \$186,581; value of farm and other animals, \$235,799; plantation and mechanical tools, \$66,216; watches, jewelry, etc., \$16,343; all other property, \$62,918; real estate, \$2,517,409; personal estate, \$2,163,049; aggregate value of whole property, \$4,498,346.

Property returned by colored taxpayers: Number of acres of land, 5,082, and value of same, \$35,042; city or town property, \$53,785; money and solvent debts, \$1,680; merchandise, \$20; household and kitchen furniture, \$25,246; watches, jewelry, etc., \$400; farm and other animals, \$33,743; plantation and mechanical tools, \$7,527; value of all other property, \$2,572; aggregate value of whole property, \$176,178.

The tax returns for 1901 show a gain of \$165,329 over the returns for 1900.

Of the public schools of Coweta county the 42 for whites have an average attendance of 1,457 pupils and the 44 for colored have an average attendance of 1,738 pupils.

Population of Coweta county by sex and color, according to the census of 1900: white males, 5,396; white females, 5,363; total white, 10,759; colored males, 7,016; colored females, 7,205; total colored, 14,221.

Population of the city of Newnam by sex and color, according to the census of 1900: white males, 1,070; white females, 1,072; total white, 2,142; colored males, 681; colored females, 831; total colored, 1,512.

Total population of city, 3,654.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 107 calves, 2 steers, 4 bulls, 307 dairy cows, 232 horses, 61 mules, 589 swine, 2 goats.

CRAWFORD COUNTY.

Crawford County was laid out in 1822 and named in honor of Hon. William H. Crawford, for many years United States Senator from Georgia. Part was set off to Upson in 1824; part was taken from Talbot and Marion in 1827 and a part from Houston in 1830. The following counties bound it: Monroe on the north, Bibb on the northeast, Houston on the southeast, Macon on the south, Taylor on the southwest and south and Upson on the west. Along its southwestern border flows the Flint river. It is also watered by Ulcohatchee, Spring, Walnut, Sweetwater, Deep, Beaver and Echeconnee Creeks, the last named stream dividing it from Bibb county.

The surface of the country is generally uneven. The northern part of the county is productive and of a dark gray soil, adapted to cotton. The bottom lands are fertile, but liable to overflow. In the pine section, about seven miles southeast of Knoxville, there is an elevation of about 300 feet above the surrounding country, embracing between 20 and 30 acres of rich mulatto soil, well wooded. On this elevation, known as Rich Hill, is an inexhaustible supply of limestone. Here are seams of fine-grained, plastic clay, which has been much used for the manufacture of common pottery, carried on in a primitive way. A company is being organized for the establishment of a wall paper factory. This would develop the clay beds of the county.

The county is traversed by a branch of the Southern Railway System,

and for a few miles in the extreme south runs a branch of the Central of Georgia System. The Macon and Birmingham Railroad also crosses the northern part of the county. Knoxville, the county seat, on the Southern Railway, was, like the Tennessee city of that name, called after General Henry Knox, of Revolutionary memory and a citizen of Massachusetts. It has a court-house costing \$15,000.

The Methodists, Baptists and Presbyterians have churches. The county has good schools, there being 24 for whites, with an average attendance of 715, and 19 for colored, with an average attendance of 503.

The average yield per acre of the various crops is as follows: Seed cotton, 500 to 600 pounds; corn, 10 bushels; cow-peas, 15 bushels; ground peas, 30 bushels; chufas, 25 bushels; oats, 25 to 50 bushels; rye, 12 bushels; wheat 10 to 30 bushels; rice, 20 bushels; Irish potatoes, 75 bushels; sweet potatoes, 100 bushels. All the forage crops are cultivated and do well. From 8 to 9 months of the year broom sedge, Bermuda and other grasses give abundant food to stock, which during the three or four winter months are fed mostly on cane, rye and barley. According to the United States census of 1900 the cotton ginned for the season of 1899-1900 was 7,158 bales (upland). While there are no regular dairy farms, most families make butter and many of them send it to market. The product of milk in 1890 was 288,668 gallons; of butter, 96,186 pounds, and of honey more than 10,000 pounds. By the census of 1890 there were 648 sheep, with a wool-clip of 619 pounds; 4,797 cattle, 6,374 milch-cows, 98 working oxen, 472 horses, 1,458 mules, 7,766 swine and 37,000 poultry, with a production of 44,000 dozens of eggs. It is estimated that there are 500 goats.

About 2,500 acres are devoted to peaches, 50 to plums, 25 to apples and 10 to pears.

Fish are abundant and many of them are marketed.

There are about 500 acres devoted to peaches and 100 to plums. There are about 20 vineyards raising fine varieties of grapes, from 75 per cent. of which wine is made, while 25 per cent. are sold in the market.

The county has asbestos, sandstone, limestone and clay.

There are 2 flour, 1 flour and grist mill and 9 grist mills, 13 saw-mills and 1 planing-mill. All the flour and grist-mills except 2 are operated by water; the sawmills by steam. There are also 3 turpentine distilleries.

The cotton receipts from the entire county are 7,500 bales.

The area of Crawford county is 334 square miles, or 213,760 acres.

Population in 1900, 10,368, an increase of 1,053 since 1890; school fund, \$7,063.34.

By the Comptroller-General's report for 1900 there are: Acres of improved land, 198,926; of wild land, 1,796; average value per acre of improved land, \$2.84; of wild land, \$0.52; city or town property, \$39,555; money and solvent debts, \$39,535; value of merchandise, \$26,115; household and kitchen furniture, \$48,315; farm and other animals, \$117,615; plantation and mechanical tools, \$26,654; watches, jewelry,

etc., \$2,094; value of all other property, \$21,459; real estate, \$616,918; personal estate, \$285,630; aggregate value of whole property, \$902,548.

Property returned by colored taxpayers: Number of acres of land, 9,048; value of land, \$26,321; city or town property, \$595; money and solvent debts, \$300; household and kitchen furniture, \$9,351; farm and other animals, \$23,984; plantation and mechanical tools, \$4,117; value of all other property, \$1,862; aggregate value of whole property, \$66,652.

The tax returns for 1901 show a gain of \$70,296 in the value of all property over the returns of 1900.

There are two small towns in Crawford county, Knoxville and Roberta, the former containing 300 and the latter 252 inhabitants. These two towns are in the same militia district, which has a population of 2,408.

For many years there lived in this county Colonel Benjamin Hawkins, a native of North Carolina, an excellent French scholar, a member of General Washington's military family, member of Congress from North Carolina (1782-1783), and later superintendent of Indian affairs in the south.

Population of Crawford county by sex and color according to the census of 1900: white males, 2,333; white females, 2,217; total white, 4,550; colored males, 2,905; colored females, 2,913; total colored, 5,818.

Domestic animals in barns and inclosures, not on farms or ranges, in Crawford county, June 1, 1900: 4 calves, 6 steers, 7 dairy cows, 10 horses, 13 mules, 37 swine.

DADE COUNTY.

Dade County was laid off from Walker in 1837. It was named in honor of Major Francis Langhorne Dade of the United States Army, who while on a march to Fort King, in Florida, was killed by the Seminole Indians, December 28, 1835. All but two of the detachment shared his fate.

Dade county is triangular in shape, with its base on the Tennessee line and its apex on the boundary between Georgia and Alabama, and a little northwest of the line that divides Walker from Chattooga county. Tennessee is on the north, Walker county on the east and southeast and Alabama on the west. The principal stream is Lookout creek. The Alabama Great Southern Railroad runs through Lookout valley from the Tennessee to the Alabama line. On this road is Trenton, the county seat, located on Town creek between Lookout and Raccoon Mountains. Other towns on this road are Morganville, Rising Fawn, Clover Dale and Smith. The county is well wooded with oak, hickory, cedar, poplar, gum, pine, walnut, chestnut, locust and mountain birch. Sulphur and chalybeate springs abound.

The lands in Lookout valley, which extends through the county, are very fertile, producing the staple crops, grasses and clover, almost every

variety of vegetables, and such fruits as apples, peaches and grapes, all of excellent flavor. The average yield of the different crops per acre is: Seed cotton (upland), 600 to 700 pounds; wheat, 15 to 20 bushels; corn, 25 bushels; oats, 30 bushels; barley, 20 bushels; rye, 15 to 20 bushels; crab grass hay, 4,000 pounds; clover, 6,000 pounds; corn fodder, 600 pounds; sorghum syrup, 250 to 275 gallons; Irish potatoes, 150 bushels. The mountains furnish fine summer range for stock. On them are many acres of rich lands. In 1890 there were in this county 1,114 sheep, with a wool-clip of 1,359 pounds; 2,277 cattle, 755 milch-cows, 146 working oxen, 437 horses, 426 mules, 7 donkeys, 4,061 swine and 29,433 poultry of every kind. The county also produced 9,547 pounds of honey, 60,223 dozen eggs, 258,662 gallons of milk, and 66,896 pounds of butter.

In the forests are found deer, wild turkeys and other game, and in the creeks plenty of fish.

Bituminous coal, an excellent quality of iron ore and other valuable minerals abound. The Dade coal mines, worked by convict labor, furnish great quantities of coal and coke for factories, foundries and other uses.

The climate of Dade is cold in winter, but delightful in the spring and summer, bracing and healthful the year round.

The area of Dade county is 188 square miles, or 120,320 acres.

Population in 1900, 4,578, a loss of 1,229 since 1890; school fund, \$3,184.79.

By the Comptroller-General's report for 1900 there are: Acres of improved land, 96,515; of wild land, 1,050; average value per acre of improved land, \$4.18; of wild land, \$0.47; city property, \$52,870; money, etc., \$73,794; merchandise, \$23,620; stocks and bonds, \$7,300; cotton manufacturing, \$3,496; iron works, \$10,000; capital invested in mining, \$12,000; household and kitchen furniture, \$31,745; farm and other animals, \$69,620; plantation and mechanical tools, \$13,356; watches, jewelry, etc., \$2,482; value of all other property, \$6,302; real estate, \$509,273; personal estate, \$258,461; aggregate value of whole property, \$767,734.

Property returned by colored taxpayers: Number of acres of land, 472; value of land, \$1,362; city or town property, \$125; household and kitchen furniture, \$525; farm and other animals, \$846; plantation and mechanical tools, \$67; value of all other property, \$23; aggregate value of whole property, \$3,004.

The tax returns for 1901 show a decrease in the value of all property since 1900 amounting to \$39,557.

The public school system embraces 23 schools for white and 1 for negroes, with a daily average attendance of 700 in the white schools and 27 in the one for negroes.

There are 689 inhabitants in the Trenton district and 349 in the town of Trenton.

The Rising Fawn district has 740 inhabitants, of whom 212 live in the town of Rising Fawn.

McMahon district contains 391 people, of whom 138 live in a village called New England City.

Population of Dade county by sex and color, according to the census of 1900: white males, 2,101; white females, 2,039; total white, 4,140; colored males, 298; colored females, 140; total colored, 438.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 90 calves, 43 steers, 2 bulls, 131 dary cows, 48 horses, 40 mules, 1 donkey, 93 sheep, 518 swine, 102 goats.

DAWSON COUNTY.

Dawson County was formed from Lumpkin, Forsyth and Gilmer counties in 1857, and was named in honor of Hon. William C. Dawson, a representative from Georgia in the United States Congress, later United States Senator from his native State, and still later, judge of the Ocmulgee circuit. The following counties bound it: Fannin and Gilmer on the north, Lumpkin on the northeast and east, Hall on the east, Forsyth on the south, Cherokee, Pickens and Gilmer on the west. The Etowah river flows through the county, and into this empty several tributary creeks, the largest of which, Amicalola, rises in the northwestern part of the county and runs through it in a southeasterly direction. It has a fall of several hundred feet. The appearance of the range of mountains to the south and west, as viewed from the summit of the falls is scarcely surpassed in grandeur.

Dawson county is in the heart of the gold region. On nearly every branch on the north side of the Etowah river is a placer gold mine. From the bed of the river itself large quantities of gold have been taken and washed out with an iron pan, rewarding well the labor thus employed.

The forest growth is oak of the various kinds, hickory, cedar, poplar, chestnut, locust, gum, walnut, mountain birch and pine. Thus there is abundance of hardwoods for manufacturing purposes.

The bottom lands of the Etowah are rich and very productive. Taking all the lands of the county, the average yield per arce is: seed cotton, 600 pounds; corn and rye, 20 bushels; oats, 25 bushels; wheat, 10 bushels; Irish potatoes, 50 bushels; sweet potatoes, 75 bushels; field-peas, 10 bushels, crab-grass hay, 2,000 pounds; corn fodder, 250 pounds; sorghum syrup, 150 gallons. The best lands show yields far above these averages. Tobacco also gives a remunerative yield.

According to the United States census of 1900, during the season of 1899 and 1900, there were ginned 1,297 bales of upland cotton.

Vegetables of all kinds do well. So also do apples.

In 1890 there were in Dawson county 2,479 sheep, with a wool-clip of 3,619 pounds; 3,122 cattle, of which 447 were working oxen, and 1,196 milch-cows, 365 horses, 606 mules, 14 donkeys, 6,510 swine and 47,467 domestic fowls of all kinds. Some of the farm products were 361,077 gallons of milk, 102,105 pounds of butter, 60,696 dozens of eggs, and 13,449 pounds of honey.

There are 30 schools in the county belonging to the public school system of Georgia. The average daily attendance is 780 in the 29 schools for whites and 12 in the one for negroes. The school fund of the county is \$3,737.63.

There are no railroads in the county.

Dawsonville, the county site, is a small town of 217 inhabitants. The Dawsonville district which includes the town has a population of 808.

The area of Dawson county is 209 square miles, or 133,760 acres. Its population by the census of 1900 was 5,442, a slight falling off from 1890 when it was 5,612.

The following returns are taken from the Comptroller-General's report for 1900: Acres of improved land, 128,069; of wild land, 14,842 (these returns not agreeing with the United States government survey, as seen above); average value per acre of improved land, \$2.85; of wild land, \$0.48; city or town property, \$10,700; money and solvent debts, \$46,697; merchandise, \$13,344; invested in cotton manufactories, \$1,200; invested in mining, \$30.00; household and kitchen furniture, \$25,262; farm and other animals, \$70,984; plantation and mechanical tools, \$14,805; watches, jewelry, etc., \$1,035; value of all other property, \$3,959; real estate, \$384,226; personal estate, \$180,358. Aggregate value of whole property, \$564,584.

Property returned by colored taxpayers: Number of acres of land, 320; value of land, \$460.00; money and solvent debts, \$15.00; household and kitchen furniture, \$250.00; watches, etc., \$5.00; farm and other animals, \$911.00; plantation and mechanical tools, \$146.00; value of all other property, \$32.00. Aggregate value of whole property, \$1,819.

The tax returns for 1901 show a gain of \$3,767 in the value of all property, over the returns of 1900.

Population of Dawson county by sex and color, according to the census of 1900: white males, 2,531; white females, 2,740; total white, 5,271; colored males, 91; colored females, 80; total colored, 171.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 2 calves, 2 steers, 11 dairy cows, 5 horses, 3 mules, 16 swine.

DECATUR COUNTY.

Decatur County was laid off from Early in 1825 and was named for Commodore Stephen Decatur, of Maryland, an officer of the United States Navy, distinguished in the war with the Barbary Powers, and later in the second war with England (1812-1815). It is bounded by the following counties: Early, Miller, Baker and Mitchell on the north, and Thomas on the east. The State of Florida bounds it on the south and west. The State of Alabama also bounds it on the west for a few miles. The Flint river runs across the county and the Chattahoochee all along its western boundary, the two streams uniting at the southwest corner of the county to form the Apalachicola river. Two branches of

the Plant System and the Georgia Pine Railway traverse the county in different directions. Thus the people have not only excellent railroad advantages, but also splendid water transportation by its two great rivers. Other streams are Musquito, Willacoochee, Spring, Swamp and Tired creeks, and in the southeast corner Ochlockonee river. There are also many small lakes and ponds. It would be difficult to find a better watered country. In all the streams fish abound. The climate is pleasant, even the summer heat being greatly modified by breezes from the Gulf of Mexico.

The soil of the eastern section is mostly red clay, with a good subsoil and adapted to cotton, sugar-cane, tobacco, corn, fruit and potatoes. In the western section the soil is generally sandy, and adapted to the same crops, except tobacco. The average yield per acre under ordinary culture is: 10 bushels of corn; seed cotton, 400 to 500 pounds; sweet potatoes, 50 to 75 bushels, etc. Under good culture the average per acre is much higher, as for instance, corn, 20 bushels; oats, 25 bushels; sweet potatoes, 200 bushels; field peas, 15 bushels; ground peas, 25 bushels; seed cotton, 750 pounds; sea-island cotton, 400 pounds; sugar-cane syrup, 350 gallons; Cuba and Sumarta cigar tobacco, 600 pounds. The grasses and all the forage crops grow luxuriantly. There is such good pasturage the year round that hay is not made in all parts of the county. It does splendidly where it is cultivated. Vegetables of all kinds, fruits and berries do well; 5,000 acres are devoted to peaches and 250 to plums. There are 22 dairy farms, and the Jersey is the favorite cow. During the short time in winter when cattle must be fed, the daily ration for each cow costs about 15 cents.

By the census of 1890 there were 10,363 sheep, with a wool-clip of 28,961 pounds; 22,247 cattle, 5,101 milch-cows, 1,835 working oxen, 2,188 horses, 589 mules, 25,204 swine, and 70,000 poultry of all kinds. Among the farm products are 204,586 dozen eggs, 6,632 pounds of honey, 413,248 gallons of milk, 75,000 pounds of butter and 60 pounds of cheese.

Bainbridge, the county site, named for another gallant commodore of the early days of the republic, and a native of New Jersey, is located on the Flint river and at the junction of two railroads. It is a growing, prosperous town, with an electric light plant, an ice factory and two banks, whose capital aggregate \$65,000. The Georgia Pine Railway has its shops here. This is a good point for shipping goods by either steamboat or rail. The population of Bainbridge by the census of 1900 was 2,641 in the corporate limits, or, if the whole Bainbridge district is included, 3,669.

Climax is another thriving town at the junction of two branches of the Plant System.

There are in Decatur county a buggy factory, novelty works, a barrel factory, four large sawmills, eight smaller ones, and about 12 still smaller scattered through the county; 21 turpentine stills, and nearly 100 grist mills, large and small.

A company has been formed to build a cotton factory at Bainbridge.



TOBACCO FARM IN DECATUR COUNTY.

According to the United States census of 1900 the cotton ginned for 1899 was 4,551 bales of upland, and 340 of sea-island.

The shipments of cotton from this county and vicinity amount to near 7,000 bales annually, about 3,000 of which are shipped from Bainbridge. In the southern section of the county tobacco is coming to the front. There are also heavy shipments of sugar-cane syrup from Bainbridge and Climax. This industry is rapidly coming to the foremost place in Decatur and other counties of this part of Georgia.

The timbers of this county are pine, cypress and a variety of oaks.

Schools and churches abound in town and country. There is an average attendance of 1,967 pupils in the 78 white schools, and 1,821 in the 57 colored schools.

The area of Decatur county is 1,010 square miles or 646,400 acres.

Population in 1900, 29,454, a gain of 9,505 since 1890; school fund, \$18,280.57.

By the Comptroller-General's report for 1900 there are: Acres of improved land, 650,150; of wild land, 37,448; average value per acre of improved land, \$2.14; of wild land, \$1.56; city property, \$567,176; gas and electric light, \$10,260; money; etc., \$436,309; value of merchandise, \$197,282; shipping and tonnage, \$2,900; stocks and bonds, \$600; cotton manufactories, \$80,000; household furniture, \$219,835; farm animals, \$389,993; plantation and mechanical tools, \$88,149; watches, jewelry, etc., \$20,055; value of all other property, \$208,070; real estate, \$2,020,721; personal estate, \$1,732,442; aggregate value of whole, \$3,753,663.

Property returned by colored taxpayers: Acres of land, 41,642; value, \$87,956; city property, \$52,000; money, etc., \$549; merchandise, \$625; household furniture, \$31,190; watches, silver, etc., \$829; farm animals, \$62,556; plantation and mechanical tools, \$13,397; value of all other property, \$4,954; aggregate value of whole, \$263,191.

The tax returns of 1901 show an increase of \$404,263 over the returns of 1900.

The tobacco farm of A. Cohen & Co., in this county, is of extensive proportions. This company owns 15,000 acres in the county and nearly 1,000 of these are planted in tobacco. In order to produce the rare Sumatra tobacco which brings the highest price in the market nearly 1,000,000 yards of canvas are used to cover this area. Nearly 451,000 pounds of tobacco were taken from the farm last year, and the prices obtained for it ranged between 25 cents and \$4 a pound. The yield varied from 800 to 1,400 pounds to the acre.

During the busy season 1,500 people are employed on this plantation and 900 hands are regularly employed the year round; 2,000 people live on the plantation. Three stores are operated for them which sell to none but those connected with the farm. The merchandise account last year was \$60,000. On the place are kept 1,260 cattle which largely enrich the soil.

On this great plantation corn, cotton and other crops are raised.

The soil necessary for this special kind of tobacco is a light gray, free from lime. The great canvas covering is spread at a height of nine feet and remains over the plants during the entire time of their growth. Under it is done all the plowing and other work. Only such sunlight as gets through this canvas reaches the plants and the necessary water seeps through it.

It has been proved by experiments that this method of covering the crop makes the leaves a light yellow color, imparts to them a sufficient degree of toughness and a light, thin texture, and makes the most highly prized tobacco. It is used chiefly for wrappers for fine cigars.

The total population of Decatur county in 1900 has already been stated as 29,454, an increase of 9,505 since 1890.

Population of Decatur county by sex and color, according to the census of 1900: white males, 6,895; white females, 6,781; total white, 13,676; colored males, 7,869; colored females, 7,909; total colored, 15,778.

Population of Bainbridge City by race and color, according to the census of 1900: white males, 598; white females, 572; total white, 1,170; colored males, 656; colored females, 815; total colored, 1,471.

Total population of Bainbridge, 2,641.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 94 calves, 32 steers, 1 bull, 142 dairy cows, 207 horses, 29 mules, 22 donkeys, 218 swine, 26 goats.

DEKALB COUNTY.

DeKalb County was formed in 1822 and named for the Baron de Kalb, who died for the liberties of America at the battle of Camden, South Carolina, on the 19th of August, 1780. The following counties bound it: Milton on the north, Gwinnett on the east and northeast, Rockdale on the southeast, Rockdale, Henry and Clayton on the south, and Fulton on the west. The Chattahoochee river runs along its northern boundary. South river and its tributaries water the central and southern parts of the county and Yellow river runs across its eastern angle.

The western border of the county is so close to the city of Atlanta that the people of DeKalb enjoy all the benefits that accrue to those living in the neighborhood of a great city.

Three great railroad lines, traversing the county in different directions, center in Atlanta. All those living on the lines of these different roads have superior advantages for trucking, fruit-growing and dairying.

Decatur, the county site, is only six miles from the union depot in Atlanta. Three lines of electric railway and the Georgia railroad afford constant and rapid communication between the town and city, and all the intervening country is thickly settled. Many who have their homes in Decatur or along the different lines running from that point into the



AGNES SCOTT INSTITUTE, DECATUR, GA.

city, transact their business in Atlanta. The new court-house at Decatur, just completed, is a handsome structure, built at a cost of \$60,000. The Agnes Scott Institute for young ladies, whose handsome building shows to great advantage, is one of those excellent schools for girls, for which Georgia is so noted. The North Georgia Orphans' Home is also located at Decatur.

At Ingleside, a few miles from Decatur, is the cotton-mill of the Scottdale Manufacturing Company. Several fertilizer factories are located in this county, and one of them is of mammoth proportions.

The Decatur militia district, which includes the town and the adjacent thickly settled territory, contains, 4,360 inhabitants, of whom 1,418 live in the town.

Stone Mountain, on the Georgia Railroad, about ten miles northeast of Decatur, derives its name from the mountain of granite which rises to about 1,500 feet above the level of the sea, and 900 feet above the surrounding country. The Stone Mountain district has 1,556 inhabitants, 835 of whom live in the town.

Lithonia, in the southeastern part of the county, is also on the Georgia Railroad. There are in the Lithonia district 2,548 inhabitants, of whom 1,208 live in the town.

The quarries of granite and gneiss at and near Stone Mountain and Lithonia are sources of great profit to the people of this section of Georgia.

The timbers of DeKalb county are the various hardwoods and some pine, the same as in other counties of the crystalline belt of Georgia.

The average yield of the lands to the acre is: seed cotton, 600 to 700 pounds; corn, 10 to 12 bushels; oats, 20 bushels; wheat and rye, 10 bushels each; Irish and sweet potatoes, 100 bushels each; crab-grass hay, 3,000 pounds.

According to the United States census of 1900, during the season of 1899-1900, there were ginned 6,981 bales of upland cotton in DeKalb county.

The public schools number 72, and have an enrollment of 2,750 pupils in the 55 schools for whites and 1,500 in the 17 schools for negroes.

There are several fine dairy farms in DeKalb county, on which are more than 300 milch-cows, the Jersey being the favorite.

By the census of 1890 there were in this county 290 sheep, with a wool-clip of 482 pounds; 5,916 cattle, of which 170 were working oxen and 2,841 milch-cows. Of the cows 195 were pure-bred, recorded, and 1,177 were graded as one half blood or higher. There were also 1,043 horses, 1,465 mules, 2 donkeys, 5,746 swine and 74,482 domestic fowls of all kinds. Among the farm products were 1,167,319 gallons of milk, 331,022 pounds of butter, 167,848 dozens of eggs and 21,294 pounds of honey.

The public school fund of DeKalb county is \$11,256.25.

The area of the county is 271 square miles, or 173,440 acres. The population, by the census of 1900, was 21,112, a gain of 3,923 since 1890.

The Comptroller-General's report for 1900 gives the following returns of property: Acres of improved land, 165,990; average value per acre, \$1.73; value of city or town property, \$844,574; merchandise, \$136,615; money and solvent debts, \$428,247; household and kitchen furniture, \$215,017; farm and other animals, \$215,533; plantation and mechanical tools, \$62,382; watches, jewelry, etc., \$17,691; value of all other property, \$59,442; real estate, \$3,773,088; personal estate, \$1,231,101. Aggregate value of whole property, \$5,004,189.

Property returned by colored taxpayers: number of acres of land, 1,979; value of land, \$29,859; city or town property, \$30,750; money and solvent debts, \$200.00; merchandise, \$10.00; household and kitchen furniture, \$9,628; watches, jewelry, etc., \$159.00; farm and other animals, \$9,449; plantation and mechanical tools, \$1,918; value of all other property, \$144.00. Aggregate value of whole property, \$82,117.

The tax returns for 1901 show a gain of \$4,219 in the value of all property over the returns of 1900.

Population of DeKalb county by sex and color, according to the census of 1900: white males, 6,991; white females, 7,077; total white, 14,068; colored males, 3,541; colored females, 3,503; total colored, 7,044.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 105 calves, 15 steers, 8 bulls, 312 dairy cows, 198 horses, 83 mules, 3 donkeys, 6 sheep, 452 swine, 10 goats.

DODGE COUNTY.

Dodge County was cut off from Telfair, Pulaski and Montgomery in 1871, and named in honor of William E. Dodge of New York, who had made very liberal investments in that section. It is bounded by the following counties: Pulaski on the north and northwest, Laurens on the northeast, Montgomery and Telfair on the southeast and south, Wilcox and Pulaski on the southwest and west. The Ocmulgee river runs along its western and southwestern border. Little Ocmulgee, a tributary of the Ocmulgee, runs through the county. The county is also watered by Cypress, Crooked, Sugar and Turnpike creeks.

Eastman, the county seat, is on the Southern Railway at a point which was selected for a depot and station in 1871. It is a flourishing little city containing 1,235 people, and is blessed with a splendid supply of pure water from Artesian wells. The water is distributed in mains on the various streets and supplied to the houses just as in large cities. It also boasts an ample fire department. Its export trade reaches \$2,000,000. These exports are 10,000 bales of cotton, 5,000 car-loads of lumber, potatoes, peas, peanuts, cane syrup, cattle, wool, chickens and vegetables.

Just outside of Eastman is a large saw and lumber mill, and ten miles below it is another, which does most of its business through the banks of Eastman, of which there are two, with an aggregate capital of \$50,000.

Eastman has a splendid public school system, and churches of the

leading denominations. The public schools of the county are flourishing. In the 45 schools for whites there is an average attendance of 1,306, and in the 26 for negroes, an average attendance of 932. It has also a large furniture factory, and at Cox, just below the city, is the Colville Crate factory.

This enterprising little city was named in honor of William Pitt Eastman of New York, one of the most tireless promoters of its interests.

The lands along the Ocmulgee, Little Ocmulgee and their various tributaries, are very productive. Their average yield per acre is: corn, 15 bushels; oats, 10 bushels; wheat, 10 bushels, rye, 10 bushels, sweet potatoes, 100 bushels; field-peas, 8 to 10 bushels; ground-peas, 30 bushels; seed cotton, upland, from 500 to 1,100 pounds; sea-island, 350 pounds; crab-grass hay, 2,000 to 3,000 pounds; corn forage, 2,000 pounds; German millet, 4,000 pounds; sugar-cane syrup, 350 gallons.

According to the United States census of 1900, the production of cotton in 1899 was 10,729 bales (upland).

The lands of the county are especially valuable on account of the fine timber which is sawed into lumber and sent to the markets. The naval stores obtained from the same source are of great value. All the enterprises of the county are prosperous, and the population is increasing rapidly. The winter climate is delightful. Eastman, though considerably below the Middle Georgia belt, is 356 feet above sea level. The thermometer in Dodge county has never been known to register 100, and sunstrokes are unheard of here.

By the census of 1890 Dodge county had 11,500 sheep, with a wool-clip of 24,634 pounds; 7,866 cattle, 434 working oxen, 2,525 milch-cows with a production of 3,980 pounds of butter and 172,435 gallons of milk; 600 horses, 640 mules, 12,000 swine, 32,000 poultry producing 46,000 dozen eggs. The production of honey is small, only 550 pounds.

Area of Dodge county is 495 square miles, or 316,800 acres. Population in 1900, 13,975; school fund, \$10,083.52.

By the Comptroller-General's report for 1900 there are: acres of improved land, 233,234; of wild land, 112,828; average value per acre of improved land, \$2.66; of wild land, \$1.23; city property, \$208,663; shares in bank, \$44,718; gas and electric light companies, \$10,000; money, etc., \$152,093; merchandise, \$64,117; cotton manufactories, \$3,500; value of household furniture, \$87,170; farm and other animals, \$193,118; plantation and mechanical tools, \$93,859; watches and jewelry, \$5,366; value of all other property, \$81,773; real estate, \$967,601; personal estate, \$676,723. Aggregate value of whole property, \$1,644,324.

Property returned by colored taxpayers: number of acres of land, 16,914; value of land, \$45,017; city or town property, \$6,668; value of merchandise, \$472.00; money and solvent debts, \$779.00; household and kitchen furniture, \$9,405; watches, jewelry, etc., \$274.00; farm and other animals, \$23,124; plantation and mechanical tools, \$4,069; value of all other property, \$917.00. Aggregate value of whole property, \$90,824.

The tax returns for 1901 show an increase over the returns of 1900, amounting to \$107,186 in the value of all property.

Population of Dodge county by sex and color, according to the census of 1900: white males, 4,193; white females, 4,077; total white, 8,270; colored males, 2,928; colored females, 2,777; total colored, 5,705.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 69 calves, 48 steers, 150 dairy cows, 67 horses, 27 mules, 296 sheep, 680 swine, 13 goats.

DOOLY COUNTY.

Dooly County was described in the *lottery act* of 1821. Part of it was added to Pulaski in 1826, and a part to Lee in 1827. It was named in honor of Colonel John Dooly, a gallant Georgia leader in the Revolution, who was murdered by the Tories in his own house and in the presence of his family in 1780. The following counties bound it; Houston and Macon on the north, Pulaski and Wilcox on the east, Worth on the south, Lee, Sumter and Macon on the west. The Flint river runs along its western border. Hogscrawl, Lampkin's, Pennahatchee, Gum, Swift and Cypress creeks also water the county. The river and creeks supply abundance of fish.

The soil is a sandy loam, but red in the upper part of the county. With good culture these lands will yield by the acre: seed cotton, 800 pounds; corn, 20 bushels; oats, 25 bushels; wheat, 10 bushels; Irish potatoes, 100 bushels; sweet potatoes, 225 bushels; field-peas, 10 bushels; ground-peas, 30 bushels; sugar-cane syrup, 250 gallons; crab-grass hay, 1,000 pounds; corn fodder, 300 pounds.

According to the census of 1900 this county ginned in 1899 the amount of 18,573 bales of upland cotton.

Not only are the pine lands fertile, but the timber is very valuable, the annual output being about 150,000,000 feet, valued at \$1,350,000. There are six large sawmills with a total valuation of \$400,000.

Vienna, the county site, is largely engaged in the lumber business. So also is Cordele, where there is also a cotton factory with a capital of \$60,000 or \$80,000. Both these thriving towns are located on the Georgia Southern and Florida Railroad. Through Cordele also passes the Georgia Alabama Railroad of the Seaboard Air Line system. The Albany and Northern is another railroad connection of Cordele. This town has a fine water-works system and an ice plant. The population of Cordele by the census of 1900 is 3,473.

Dooly county has five banks, of which there are three at Cordele and two at Vienna. It has two foundries, a sash, door and blind factory, six turpentine distilleries, a large guano plant where acid phosphate is made, several fire and life insurance agencies. All the manufactories of the county have an aggregate capital of about \$600,000.

There are Methodist, Baptist, Presbyterian and Episcopal churches, several private schools and a fine system of public schools, the latter having 52 schools for whites, with an average attendance of 1,634 pupils, and 36 for colored, with an average attendance of 1,421.

The cotton receipts and shipments for the entire county are 25,000 bales, of which Cordele handles about 20,000.

In 1890 there were in the county 8,619 sheep, with a wool-clip of 16,576 pounds, 8,498 cattle, 2,379 milch cows, 228 working oxen, 906 horses, 1,882 mules, 20,784 swine, 62,000 poultry of all kinds.

Among the products are 53,000 pounds of butter, 65,000 dozen eggs, 6,000 pounds of honey, and large quantities of fine syrup made for the market and for home consumption. There are four dairy farms. Jerseys are preferred for butter and Holsteins for milk.

The area of Dooly county is 710 square miles, or 454,400 acres.

Population in 1900, 26,567, a gain of 8,421 since 1890; school fund, \$16,728.28.

By the Comptroller-General's report for 1900 there are: acres of improved land, 343,618; of wild land, 91,950; value per acre of improved land, \$3.41; of wild land, \$1.38; city property, \$588,614; bank stock, \$80,000; money, etc., \$407,221; value of merchandise, \$204,192; iron works, \$12,700; household and kitchen furniture, \$193,398; farm and other animals, \$326,683; plantation and mechanical tools, \$71,386; watches, jewelry, etc., \$10,965; value of all other property, \$175,155; real estate, \$1,889,884; personal estate, \$1,500,134. Aggregate value of whole property, \$3,390,018.

Property returned by colored taxpayers: number of acres of land, 10,573; value of land, \$30,248; city or town property, \$33,661; money and solvent debts, \$1,175; merchandise, \$2,965; household and kitchen furniture, \$19,300; watches, jewelry, etc., \$256.00; farm and other animals, \$26,627; plantation and mechanical tools, \$6,380; value of all other property, \$1,548. Aggregate value of whole property, \$122,160.

The tax returns for 1901 show an increase in the value of all property over the returns for 1900, amounting to \$311,572.

Population of Dooly county by sex and color, according to the census of 1900: white males, 6,042; white females, 5,841; total white, 11,883; colored males, 7,505; colored females, 7,179; total colored, 14,684.

Population of Cordele City by sex and color, according to the census of 1900: white males, 731; white females, 769; total white, 1,500; colored males, 947; colored females, 1,026; total colored, 1,973.

Total population of Cordele 3,473.

Domestic animals of Dooly county in barns and inclosures, not on farms or ranges, June 1, 1900: 153 calves, 78 steers, 1 bull, 260 dairy cows, 190 horses, 28 mules, 516 swine, 5 goats.

DOUGHERTY COUNTY.

Dougherty County was formed out of Baker in 1854, and was named for Charles Dougherty of Athens, Georgia, one of the most noted men of the State. It is bounded by the following counties: Terrell and Lee on the north, Worth on the east, Baker and Mitchell on the south, and Calhoun on the west. The Flint river flows through the eastern part of the county, and into it in the northern part empties Kinchafoonee

creek. Along its western border flows Chichasawhatchee creek. These streams and their tributaries abound in fish.

The Brunswick and Western; and the Savannah, Florida and Western, both of the Plant System, the Georgia Alabama of the Seaboard Air Line system, the Central of Georgia and Albany and Northern, give to the county abundant facilities for travel and freight, while the Flint river gives a splendid water transportation.

Albany, the county site, situated on the west bank of the Flint river, is at the intersection of all these railroads, and hence has the very best of facilities for trade. It is a growing city, having in its corporate limits 4,606 inhabitants, or, including its immediate suburbs, 8,139, nearly double the population which appears in the census return. It has four banks, gas and electric lights, an artesian water-works plant, two good hotels, churches of the Methodists, Baptists, Presbyterians, Episcopalians and Roman Catholics, a Jewish synagogue, an excellent high school, a fine public school system and a Normal school for negroes.

Steamers ply regularly between Albany and Bainbridge.

The public roads leading from every part of the county into Albany are well graded and in good condition. The wagon trade is large, the receipts of cotton at the warehouses by this method of conveyance being 35,000 bales. The railroads bring 50,000. Albany has two large brick-yards, two cotton compresses, two fertilizer factories, a cotton seed oil-mill, valued at \$40,000, a canning factory with a capacity of 10,000 cans a day, and this city claims the largest grocery house in Southwest Georgia. The streets are wide and well-kept, lined with handsome stores and pretty residences. The court-house cost \$30,000. Few cities of its size have so many symmetrical buildings.

The first house was built in 1836 by Colonel Nelson Tift. The site of the city was at one time considered unhealthy and this retarded its growth. But the introduction of artesian wells has made it a healthy and desirable location. Hence its steady growth in recent years. The rich agricultural and fruit section surrounding it give it great advantages.

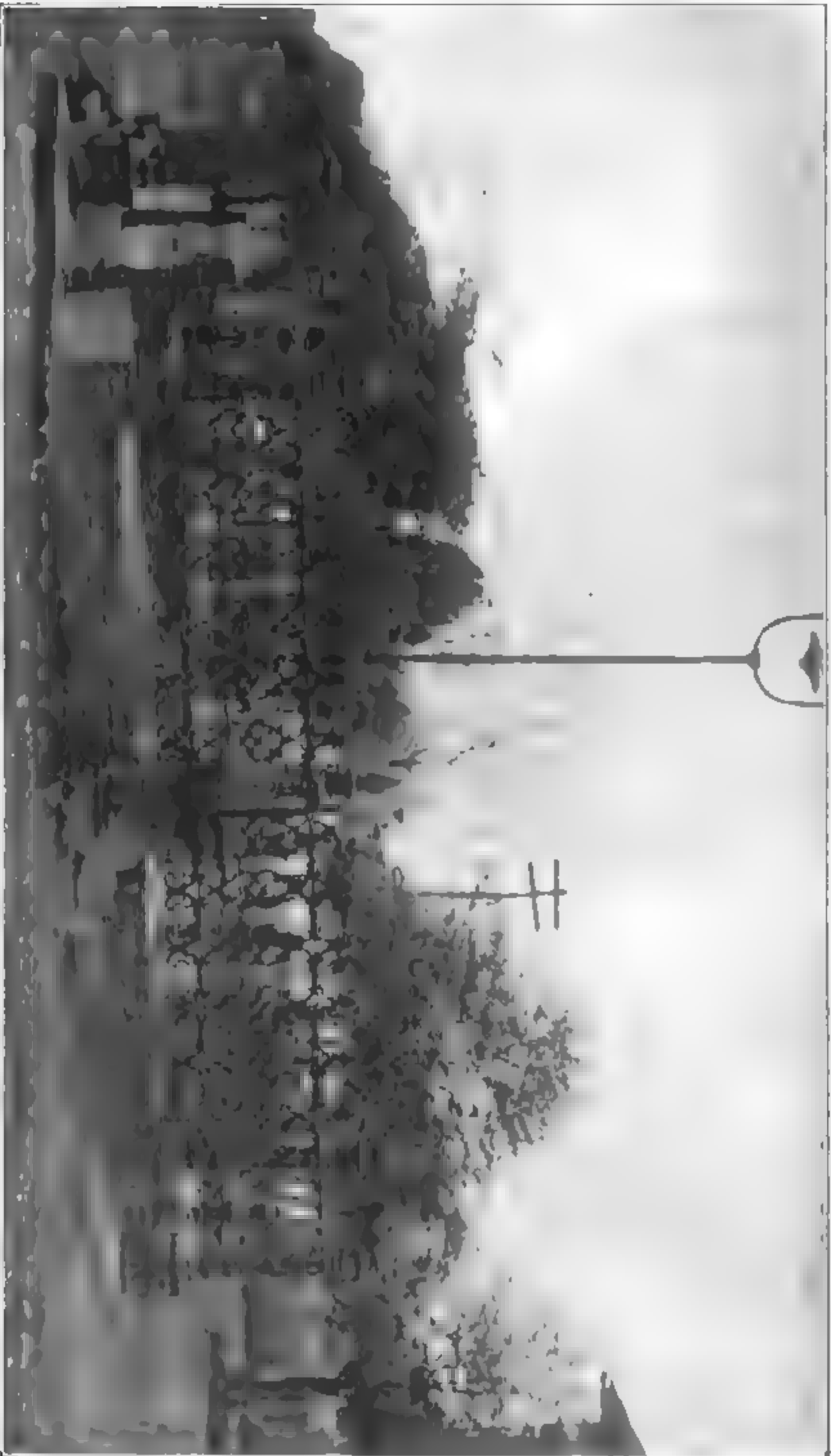
Albany hay-day carnival has become an attractive occasion to the people of city and country. The great abundance of good native grasses, especially of the crab and crowfoot varieties, afford opportunities for excellent hay, and the farmers of this section produce it in large quantities. Egyptian corn, German millet and sorghum forage are cultivated with great success.

Dougherty county has some of the most productive lands in Georgia. Under skillful farming the lands will yield to the acre: seed cotton, 1,500 pounds; corn, 20 to 30 bushels; wheat, 30 to 40 bushels; oats, 30 to 40 bushels; upland rice, 50 bushels; Irish potatoes, 100 bushels; sweet potatoes, 200 bushels, and sugar-cane syrup, 300 to 600 gallons. There are in the county three vineyards producing the best varieties of grapes.

Melons, peaches, pears, and all varieties of vegetables do well.

The county is well timbered and has an annual output of 1,000,000 superficial feet. There are three large sawmills valued at \$40,000.

According to the United States census of 1900 Dougherty county



PUBLIC ARTESIAN WELL AT ALBANY, GA.

ginned in 1899, 12,493 bales of upland and 342 bales of sea-island cotton.

By the United States census of 1890 there were 2,672 cattle, 972 milch-cows, 146 working oxen, 4,110 hogs, 14,215 poultry of all kinds; 368 horses, 1,318 mules and 1 donkey. Among the farm productions are 94,810 gallons of milk, 6,933 pounds of butter, 851 pounds of honey and 31,651 dozens of eggs.

The area of Dougherty county is 339 square miles, or 216,960 acres. The population by the United States census of 1900 is 13,679, an increase of 1,473 since 1890. According to the report of the Commissioner of Education the school fund is \$8,656.82.

In the 6 schools for whites there is an average attendance of 276 pupils, while 24 schools for negroes show an average attendance of 1,110.

According to the report of the Comptroller-General for 1900 there are: acres of improved land, 201,898; of wild land, 6,000; average value per acre of improved land, \$4.19; of wild land, \$1.69; city or town property, \$1,317,582; shares in bank, \$165,500; building and loan associations, \$46,070; money and solvent debts, \$382,439; value of merchandise, \$252,282; stocks and bonds, \$4,600; household and kitchen furniture, \$176,812; farm and other animals, \$100,597; plantation and mechanical tools, \$21,483; watches, jewelry, etc., \$28,582; value of all other property, \$234,849; real estate, \$2,172,695; personal estate, \$1,532,186. Aggregate value of all property, \$3,704,881.

Property returned by colored taxpayers: number of acres of land, 10,385; value of land, \$64,871; city or town property, \$53,945; money and solvent debts, \$2,412; value of merchandise, \$5,677; household and kitchen furniture, \$45,043; watches, jewelry, etc., \$485.00; farm and other animals, \$25,827; plantation and mechanical tools, \$5,112; value of all other property, \$2,746. Aggregate value of whole property, \$239,393.

The tax returns for 1901 show a gain in the value of all property over the returns of 1900, amounting to \$64,927.

Population of Dougherty county by sex and color, according to the census of 1900; white males, 1,238; white females, 1,213; total white, 2,451; colored males, 5,437; colored females, 5,791; total colored, 11,228.

Population of Albany City by sex and color, according to the census 1900: white males, 841; white females, 862; total white, 1,703; colored males, 1,268; colored females, 1,635; total colored, 2,903.

Total population of Albany, 4,606.

Domestic animals in Dougherty county in barns and inclosures, not on farms or ranges, June 1, 1900: 21 calves, 114 dairy cows, 164 horses, 13 mules, 25 swine, 7 goats.

DOUGLAS COUNTY.

Douglas County was named in honor of Stephen A. Douglas of Illinois, United States Senator, and a zealous champion of the constitutional rights of the Southern States. It is bounded by the following counties: Cobb and Paulding on the north, Campbell on the east and southeast, Carroll on the south and west. The Chattahoochee river runs along its eastern and southeastern border and together with some tributary creeks affords abundance of fish.

The Southern Railway traverses the northern section of the county. On this is located Douglasville, the county site, a thriving town with a State bank having a paid in capital of \$25,000. Here is located a flourishing school, known as the Douglasville College, connected with the public school system of the county. Salt (or Lithia) Springs, on the same road, noted for its health-bestowing waters, is a favorite resort, both summer and winter. This is a healthy county with a good soil and an industrious, moral and hospitable people. It is also blessed with good schools and churches.

With fair tillage the land will produce to the acre 600 or 700 pounds of seed cotton, 12 bushels of corn, 20 of oats, 10 of wheat, 10 of rye, 100 of Irish potatoes, 75 of sweet potatoes, 10 of field-peas, 15 of ground-peas, 2,000 pounds of crab-grass hay, 300 pounds of corn fodder and 150 gallons of sorghum syrup. According to the United States census of 1900 during the season of 1899-1900 there were ginned 8,091 bales of upland cotton.

In 1890 there were 658 sheep, with a wool-clip of 1,113 pounds, 3,452 cattle, 1,379 milch-cows, 232 working oxen, 308 horses, 922 mules, 1 donkey, 4,446 swine and 64,381 poultry of all kinds.

The county produced 518,669 gallons of milk, 162,627 pounds of butter, 93,299 dozens of eggs and 12,922 pounds of honey.

The forest growth of Douglas county consists in the main of hardwoods, such as the various kinds of oaks, hickory, chestnut, gum, birch, maple and some pine.

The area of Douglas county is 212 square miles or 135,680 acres. Its population in 1900 was 8,745, a gain of 951 since 1890.

The public school system of the county embraces 45 schools, with an average daily attendance of 1,312 pupils in the 34 schools for whites and 338 in the 11 schools for negroes. The report of the State School Commissioner, issued in 1900, states the school fund of Douglas county to be \$6,035.71.

The report of the Comptroller-General for 1900 gives the following items: acres of improved land, 121,499; of wild land, 1,323; average value per acre of improved land, \$5.66; of wild land, \$1.60; value of city or town property, \$127,641; stocks and bonds, \$2,289; money and solvent debts, \$62,283; value of merchandise, \$18,925; invested in cotton factories, \$600.00; iron works, \$200.00; household and kitchen furniture, \$45,632; farm and other animals, \$89,366; plantation and me-

chanical tools, \$24,963; watches, jewelry, etc., \$3,049; value of all other property, \$21,110; real estate, \$816,022; personal estate, \$276,074. Aggregate value of whole property, \$1,092,096.

Property returned by colored taxpayers: number of acres of land, 4,988; value of land, \$20,395; city or town property, \$4,491; money and solvent debts, \$94.00; household and kitchen furniture, \$4,345; watches, jewelry, etc., \$136.00; farm and other animals, \$7,970; plantation and mechanical tools, \$1,356; value of all other property, \$253.00. Aggregate value of whole property, \$40,374.

The tax returns for 1901 show a gain over the returns of 1900 in the value of all property, amounting to \$53,947. The Douglasville district has 2,176 inhabitants, of whom 1,140 live in the town of Douglasville.

Salt Springs district contains a population of 1,200, of whom 330 live in the town of Lithia Springs.

Population of Douglas county by sex and color, according to the census of 1900: white males, 3,269; white females, 3,321; total white, 6,590; colored males, 1,097; colored females, 1,058; total colored, 2,155.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 31 calves, 1 bull, 72 dairy cows, 29 horses, 8 mules, 71 swine, 1 goat.

EARLY COUNTY.

Early County was laid out in 1818, a part set off to Decatur in 1823 and a part to Baker in 1825. In this latter year it was organized and named after Governor Peter Early, who came from Virginia to Georgia in 1795, and rose rapidly from one office to another until he became Governor of the State in 1813. It is bounded on the north by Clay and Calhoun counties, on the east by Baker and Miller, on the south by Miller and Decatur, and west by the State of Alabama, from which it is separated by the Chattahoochee river. It is watered by Spring, Colomokee, Harrods, and Sowhatchee creeks. The uplands are gray and sandy, with a yellow sand sub-soil. On the streams are rich hummock lands. The surface is level or slightly rolling. The yield per acre is about as follows: in corn, 15 bushels; oats, 15 bushels; sweet potatoes, 100 bushels, field-peas, 12 bushels; ground-peas, 50 bushels; upland seed cotton, 600 to 700 pounds; corn fodder, 200 pounds; sugar-cane syrup, 250 gallons; rice, 800 pounds. According to the United States census of 1900, during the season of 1899-1900 there were ginned 6,302 bales of upland cotton.

By the census of 1890 there were 7,054 sheep, with a wool-clip of 14,493 pounds, 8,353 cattle, 2,054 milch-cows, 375 working oxen, 894 horses, 751 mules, 13,090 swine and 15,760 of all kinds of poultry. Some of the farm products were 8,760 pounds of honey, 197,710 gallons of milk, 9,200 pounds of butter, and 34,705 dozens of eggs.

The streams abound in fish, and the woods in game, such as quail, turkeys, doves, squirrels, rabbits, raccoons and opossums.

The timber products are extensive; yellow pine lumber, cypress shing-

les and hardwoods, walnut and red cedar. There are 13 steam sawmills with an output of about \$60,000 annually. There are also seven grist-mills run by water. There are two planing-mills making sashes, doors and blinds, and five turpentine distilleries. There are good horse-powers on the tributaries of the Chattahoochee and the Flint.

The usual public schools prevail, supplemented by some private schools. Blakely Institute, run in connection with the public schools, is noted in that section of the State. In the public school system are 26 schools for whites, with an average attendance of 910 pupils, and 22 for colored with an average attendance of 791.

The Methodists and Baptists have the greatest number of churches and members. There are also some Presbyterians.

The Central and Georgia Pine Railroads give facilities for freight and travel, as does also the Chattahoochee river, on which are several landings, and whose steamboats carry on a considerable traffic summer and winter. The home markets of the county are Arlington, Damascus, Cedar Springs, Hilton and Blakely, the county site, which, from its position on the Central Railroad, does a thriving business. Here there is a bank with a capital of \$50,000. Of the 11,000 bales received and shipped in the county during the season of 1899-1900, Blakely handled 7,000. The Blakely district has 3,274 inhabitants, 804 of whom live in the town of Blakely.

This is a good county, and healthy, especially on the pine ridges. Considerable attention is paid to fruit. There are 15,000 peach-trees, 2,000 pear-trees and 1,000 apple-trees.

Six miles north of Blakely on Little Colomokee creek are some Indian mounds. One of these is said to be the largest in America. It is seventy feet in height and 600 feet in circumference.

Area of Early county, 503 square miles or 321,920 acres. Population of Early county in 1900, 14,828; school fund, \$9,066.57.

By the Comptroller-General's report for 1900 there are: acres of improved land, 318,998; of wild land, 3,362; average value per acre of improved land, \$2.61; of wild land, \$1.82; city or town property, \$182,980; shares in bank, \$50,000; money, etc., \$187,475; merchandise, \$70,660; cotton manufactories, \$6,250; household and kitchen furniture, \$103,980; farm and other animals, \$218,800; plantation and mechanical tools, \$40,290; watches, jewelry, etc., \$4,690; value of all other property, \$174,340; real estate, \$1,024,165; personal estate, \$890,515. Aggregate value of whole property, \$1,914,680.

Property returned by colored taxpayers: number of acres of land, 19,144; value of land, \$62,630; city or town property, \$8,740; money and solvent debts, \$720.00; household and kitchen furniture, \$24,420; watches, jewelry, etc, \$100.00; farm and other animals, \$42,245; plantation and mechanical tools, \$8,035; value of all other property, \$3,180. Aggregate value of whole property, \$150,070.

The tax returns for 1901 show an increase over the returns of 1900 in the value of all property amounting to \$204,670.

Population of Early county by sex and color, according to the census

of 1900: white males, 2,938; white females, 2,925; total white, 5,863; colored males, 4,564; colored females, 4,401; total colored, 8,965.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: no report.

ECHOLS COUNTY.

Echols County was laid out from Clinch and Lowndes in 1858, and was named for Colonel Robert M. Echols of Walton county, president of the Senate of Georgia, and afterwards Colonel of a Georgia regiment in the war with Mexico, in which country he died. Echols is bounded by Clinch and Lowndes counties on the north, by Clinch on the northeast and east, by the State of Florida on the south, and by Lowndes county on the west. The Suwannee river with its tributaries, Toms creek and the east and west forks of Suwanoochee creek in the east, and the Allapaha river, and tributary creeks in the center and west water the county and give it an abundant supply of fish.

The county is well timbered and the sawmills do a good business preparing the lumber for market. Rosin and turpentine are shipped in large quantities. Game, such as quail and wild turkeys abound in the woods.

Statenville, the county seat, is located on the Allapaha river. Statenville station is on the Savannah, Florida and Western Railway. The Atlantic, Valdosta and Western Railway also traverses this county.

According to the census of 1890 there were 893 sheep, with a wool-clip of 1,455 pounds; 4,325 cattle, 43 working oxen, 1,600 milch-cows with a product of 5,204 pounds of butter and 49,865 gallons of milk; 215 horses, 287 mules, 6,136 swine, 13,944 of all kinds of poultry, producing 7,973 dozens of eggs. There were also produced 6,503 pounds of honey and 374 pounds of cheese.

The lands, climate and soil are about the same as in adjoining counties. The average yield per acre of the various crops is: seed cotton, 600 to 700 pounds; corn, from 12 to 20 bushels; rice, 40 bushels; sugar-cane, from 300 to 500 gallons of syrup.

According to the United States census of 1900, during the season of 1899-1900 there were ginned in this county 795 bales of sea-island cotton.

There are 13 public schools in Echols county, and the daily average attendance is 209 pupils in the 10 schools for whites, and 53 in the 3 schools for negroes. According to the report of the State School Commissioner for 1900, the school fund for Echols is \$1,998.89.

The area of Echols county is 365 square miles, or 233,600 acres. The population by the census of 1900 is 3,209.

The report of the Comptroller-General for 1900 gives the following items: acres of improved land, 119,665; of wild land, 318,538 (evidently a mistake, if the statement of the United States Census Bureau about the area of the county is correct); average value per acre of improved land, \$1.12; of wild land, \$0.23; city or town property, \$2,127; money and

solvent debts, \$29,781; merchandise, \$6,351; cotton manufactories, \$30,800; household and kitchen furniture, \$21,080; farm and other animals, \$74,887; plantation and mechanical tools, \$12,694; watches, jewelry, etc., \$2,005; value of all other property, \$31,975; real estate, \$210,504; personal estate, \$209,273. Aggregate value of whole property, \$419,777.

Property returned by colored taxpayers: number of acres of land, 2,930; value of land, \$2,565; city or town property, \$75.00; household and kitchen furniture, \$2,069; watches, jewelry, etc., \$152.00; farm and other animals, \$3,654; plantation and mechanical tools, \$557.00; value of all other property, \$318.00. Aggregate value of all property, \$9,413.

The tax returns for 1901 show an increase in the value of all property of \$779 over the returns for 1900.

Population of Echols county by sex and color, according to the census of 1900: white males, 1,190; white females, 1,028; total white, 2,218; colored males, 604; colored females, 387; total colored, 991.

There is no report of the number of domestic animals in barns and inclosures.

EFFINGHAM COUNTY.

Effingham County formerly constituted a part of the parishes of St. Matthew and St. Philip, which were formed in 1758. In 1777, during the war for American independence, it was laid off as a county and named in honor of the Earl of Effingham, an ardent supporter of colonial rights. A part of this county was added to Screven in 1793 and a part to Bryan in 1794. It is bounded by Screven county on the north, the State of South Carolina on the east, Chatham county on the south, and Bryan and Bulloch counties on the west. The Savannah river separates it from South Carolina, and the Ogeechee is on its western border. These rivers and the creeks that flow into them furnish to this county a plentiful supply of fish, and in the proper season some of the finest shad found in the Savannah market are fresh from these rivers.

Springfield, the county site, is situated in a healthy pine region about 27 miles from Savannah.

Pine and cypress lumber, obtained from the forests, find a convenient market in Savannah. The annual output of lumber and naval stores amounts to \$150,000.

The productions of the county are cotton, corn, peas, potatoes, rice, melons, peaches, apples, pears, quinces and grapes. The average yield per acre with good cultivation is about as follows: corn, 12 to 15 bushels; oats, 10 to 15 bushels; cotton, 400 pounds long-staple and 800 pounds upland; sugar-cane, 250 pounds of sugar and 250 to 500 gallons of syrup. The total number of Irish potatoes raised is 6,000 bushels, and of sweet potatoes 23,172 bushels. The apple-trees number 4,614, and the peach-trees 8,360. There are some truck farms whose aggregate sales amount to

\$7,000. According to the United States census of 1900, during the season of 1899-1900, there were ginned 795 bales of upland cotton.

By the census of 1890 the county had 1,852 sheep, with a wool-clip of 3,435 pounds; 6,300 cattle, 34 working oxen, 1,808 milch-cows, 572 horses, 377 mules, 10,492 swine and 16,364 poultry of various kinds. There was a product of 91,598 gallons of milk, 7,122 pounds of butter, 6,724 pounds of honey and 24,325 dozens of eggs.

The land is generally level. The soil is varied; gray loam underlaid by yellow tertiary sand; hummock land on streams. The water is generally freestone, but in some places limestone.

The Central of Georgia Railroad runs through the western part of the county, and the Florida Central and Peninsular through the eastern. On the former are several towns and villages, of which the most important is Guyton. Other postoffices are Clio, Eden, Egypt, Marlow, Oaky, Kinson and Tusculum. The Guyton district has 2,379 inhabitants, of whom 500 live in the town of Guyton.

Ebenezer, an old German settlement, founded by the Salzburger in 1734, is about 25 miles from the city of Savannah. Some of the descendants of these people still cultivate the silkworm. The Lutheran church was used by the British as a hospital during that period of the Revolution when they had possession of Savannah and the greater part of the State.

There are in Effingham county 48 schools belonging to the public school system. The average daily attendance of pupils is 680 in the 33 for whites, and 379 in the 15 for negroes. The school fund of Effingham county was given in the report of the State School Commissioner for 1900, as \$5,018.92. The area of Effingham county is 419 square miles, or 268,160 acres.

According to the United States census of 1900, the population is 8,334 a gain of 2,735 since 1890.

The Comptroller-General reports for 1900 as follows: acres of improved land, 250,287; of wild land, 24,515; average value per acre of improved land, \$1.78; of wild land, \$0.54; city or town property, \$146,315; shares in bank, \$20,283; money and solvent debts, \$143,239; merchandise, \$32,570; stocks and bonds, \$17,536; cotton manufactories, \$16,800; household and kitchen furniture, \$66,560; farm and other animals, \$141,461; plantation and mechanical tools, \$32,613; watches, jewelry, etc., \$9,129; value of all other property, \$53,825; real estate, \$606,016; personal estate, \$549,332. Aggregate value of whole property, \$1,035,531.

Property returned by colored taxpayers: number of acres of land, 12,273; value of land, \$27,243; city or town property, \$815.00; money and solvent debts, \$1,052; household and kitchen furniture, \$4,753; farm and other animals, \$8,630; plantation and mechanical tools, \$1,467; watches, jewelry, etc., \$209.00; value of all other property, \$1,008. Aggregate value of whole property, \$48,472.

The tax returns of 1901 show a decrease of \$2,107 in the value of all property since 1900.

Population of Effingham county by sex and color, according to the census of 1900: white males, 2,349; white females, 2,281; total white, 4,630; colored males, 1,917; colored females, 1,787; total colored, 3,704.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 2 calves, 5 steers, 3 dairy cows, 6 horses, 80 mules, 107 swine.

ELBERT COUNTY.

Elbert County was laid out from Wilkes in 1790. It is bounded on the north by Hart county, on the northeast and east by the State of South Carolina, from which it is separated by the Savannah river; on the south by Lincoln, Wilkes and Oglethorpe, and on the west by Madison and Oglethorpe. It was named in honor of Colonel Samuel Elbert, commander of Georgia Continentals in the Revolution, and afterwards governor of Georgia.

Broad river flows along its western and southern border and empties into the Savannah river. Beaver Dam creek flows centrally through the county from northwest toward the southeast and empties into the Savannah river. Other streams are Bertram, Falling, Deep and Cold Water creeks. Along each of the rivers the lands are rich and very productive. Remote from them the lands are not so good, and yet with proper cultivation, yield very remunerative crops. Although in some sections, under ordinary methods, the lands do not yield more than 500 pounds of seed cotton to the acre, 10 bushels of corn and 8 of wheat, yet under rotation of crops and scientific cultivation the average yield to the acre is: seed cotton, 800 to 1,000 pounds; corn, 20 bushels; oats, 25 bushels; wheat, 15 bushels; rye, 15 bushels; barley, 25; Irish and sweet potatoes, each 100 bushels; field-peas, 20 bushels; ground-peas, 50; Bermuda grass hay, 6,000 pounds; sorghum syrup, 75 gallons. Vegetables of every variety do well, and apples and peaches are of excellent flavor. The different kinds of berries grow and mature to perfection; but nearly all these products are for home consumption. According to the United States census of 1900 there were ginned in Elbert county for the season of 1899-1900, 14,945 bales of upland cotton.

There are 931 sheep, with a wool-clip of 1,227 pounds; 6,493 cattle, 420 working oxen, 2,564 milch-cows with a product of 590,205 gallons of milk and 201,421 pounds of butter; 1,258 horses, 1,340 mules, 4 donkeys, 7,077 swine, 114,606 poultry of various kinds. Some of the other products are 77,698 dozens of eggs and 18,808 pounds of honey.

The water-powers of the county are immense. There are two cotton-mills, one at Elberton and the other at Beverly on Beaver Dam creek, both built by Georgia capital. There are also a large cotton seed oil-mill, 3 small flour and grist-mills, several small sawmills, 3 guano factories and a new \$10,000 flouring-mill with patent roller process, having a capacity of 100 barrels a day; 2 carriage factories, and 4 quarries of the best granite for building purposes.

Elberton, the county site with a population of 3,834, at the junction

of the Seaboard Air Line and one of the numerous branches of the great Southern system, is one of the best built and most progressive towns of Georgia. It has electric lights and two banks with adequate capital to give it excellent commercial advantages. A fine system of water-works is in process of construction. Here are located the majority of the manufacturing of the county. The handsome court-house cost \$35,000. Out of 30,000 bales of cotton received and shipped from this county, Elberton handles 23,000 bales. About 6,000 bales per annum are used by the two cotton-mills. The population of the Elberton district by the census of 1900 was 4,841.

Schools and churches are in every neighborhood. The average attendance on the schools is 1,350 in the 47 for whites, and 1,217 in the 31 for colored. Methodists and Baptists predominate.

The area of Elbert county is 388 square miles, or 248,320 acres. Population of Elbert county in 1900, 19,729, an increase of 4,353 since 1890. School fund \$12,073.59.

By the Comptroller-General's report for 1900 there are: acres of improved land, 220,296; average value per acre, \$4.07; city property, \$465,492; shares in bank, \$55,000; money etc., \$264,139; value of merchandise, \$94,633; stocks and bonds, \$2,000; value of household furniture, \$109,490; farm and other animals, \$144,645; plantation and mechanical tools, \$41,751; watches, jewelry, etc., \$6,500; value of all other property, \$118,305; real estate, \$1,363,042; personal estate, \$886,803. Aggregate value of whole property, \$2,247,845.

Property returned by colored taxpayers: number of acres of land, 8,769; value, \$35,353; city property, \$16,630; merchandise, \$55.00; money, \$682.00; household furniture, \$8,938; farm and other animals, \$20,872; watches, silver, etc., \$127.00; plantation and mechanical tools, \$628.00; value of all other property, \$4,621. Aggregate value of whole property, \$87,906.

The tax returns for 1901 show a gain over those of 1900 amounting to \$65,779.

Population of Elbert county by sex and color according to the census of 1900: white males, 4,981; white females, 4,955; total white, 9,936; colored males, 4,994; colored females, 4,799; total colored, 9,793.

Population of Elberton City by sex and color, according to the census of 1900: white males, 1,104; white females, 1,120; total white, 2,224; colored males, 769; colored females, 841; total colored, 1,610.

Total population of Elberton, 3,834.

Domestic animals in barns and inclosures, not on farms or ranges in Elbert county, June 1, 1900: 5 calves, 2 bulls, 17 dairy cows, 57 horses, 25 mules, 61 swine, 1 goat.

Other postoffices besides Elberton are Bowman, Cold Water, Concordia, Critic, Dewyrose, Dove's Creek, Flatwoods, Academy, Goss, Heardmont, Nickville, Middletown, Hulmeville, Overton, Rockfield, Ruckersville, Stansell, Webster, Place, and Wych.

At the junction of the Savannah and Broad rivers once stood the town of Petersburg. It is now almost deserted.

About three miles above this place on the Rembert plantation now (1900) owned by Mr. Tate, is a conical-shaped mound 40 or 50 feet high, the circumference of whose base is two or three hundred yards. This mound is entirely composed of the loamy, rich earth of the low grounds. The top or apex of the mound is flat, a spiral path leading from the ground to the top. There are four niches or sentry boxes, excavated out of the sides of this mound, at different heights from the base, facing the four cardinal points, which are entered from the winding path, and appear to have been designed for look-outs or resting places. Bartram, the celebrated botanist, who visited this mound, and from whose description the above is somewhat condensed, stated on the authority of the owner of these lands, that the mound itself in one season yielded more than 100 bushels of corn.

In the period immediately following the Revolutionary War, the people of this section of Georgia suffered much from the depredations of the Indians. One day a party of savages attacked the home of Mr. Richard Tyner on Coody's creek in the flat woods, when Mr. Tyner was absent from his home. The red-skins killed Mrs. Tyner, dashed out the brains of the youngest child against a tree, and scalping another little one left it for dead. A little son of Mr. Tyner, named Noah, amidst the confusion escaped and hid in a hollow tree, which for many years afterwards was called Noah's Ark. Another son, fleeing to the Savannah river, made his escape. Mary and Tamar Tyner were carried off by the Indians to the Coweta towns. After many years a man named John Manack, trading with the Indians purchased Mary, who returned with him to Elbert county and became his wife. He tried also to purchase Tamar, but the Indians would not sell her. One day an old Indian woman learning that her countrymen intended to burn Tamar alive on account of a suspicion that she was planning her escape, helped the poor white girl to escape down the Chattahoochee river in a canoe. Tamar, after many narrow escapes, finally reached Appalachicola Bay. From thence she went by a vessel to Savannah from which city she made her way back to Elbert county. There she afterwards married a Mr. Hunt.

Another remarkable incident was this: During one of the Indian attacks upon the frontier settlements, the savages, after killing several persons, carried off a little girl about 12 years old. A man by the name of William Suttle determined to rescue the child or die in the attempt. In the middle of the night he came upon the party and saw the little girl seated upon the lap of a brawny Indian, who appeared delighted with his prisoner. After a while the Indian arose and stood erect. Instantly Suttle fired and shot the Indian through the heart. In the midst of the alarm consequent upon this sudden attack, the little girl ran in the direction from which the gun was fired, and was received by Suttle, who, putting her upon his horse and springing into his saddle, carried her back safely to her friends.

One of the most remarkable women that any country has ever produced resided in Elbert county. This was Nancy Hart, whose maiden name was Morgan. Her husband was brother of Colonel Thomas



PUBLIC ARTESIAN WELLS AT KILLEBUCK GA.

Hart of Kentucky, who married a Miss Gray of Orange county, North Carolina, and who was father-in-law of Henry Clay and maternal uncle of the Hon. Thomas Hart Benton. Nancy Hart removed with her husband to Georgia before the Revolution and settled on Broad river in Elbert county. An apple orchard marks the spot where they dwelt. Near by them was a creek emptying into Broad river which, during the war of the Revolution, was called "War Woman's Creek," on account of the many marvelous exploits of Nancy Hart. She was an ardent partiot in whose untutored bosom dwelt the heart of a hero.

One evening, as she and her children were seated around a log fire, on which was boiling a pot of soap, one of the family discovered some one peeping through the crevices of the chimney, and quietly informed Nancy of it. She talked on unconcernedly and stirred the soap, watching for the reappearance of the spy. Suddenly, like a flash, she dashed a ladle of boiling soap into the face of the eavesdropper, who, before he could recover, was seized by the dauntless woman and bound fast as a prisoner.

On another occasion a party of Tories came to her house and ordered her to cook dinner for them. She stormed and raged, but making a virtue of necessity did as she was told. While they were seated at the table Nancy, with the help of her little daughter, managed to secure their guns. When they attempted to recover their arms she killed one, and quickly seizing another gun wounded another. Thereupon the other three Tories surrendered at discretion, and were hanged by Mr. Hart and the neighbors who had just come in. The tree upon which they were hanged was pointed out as late as 1838.

On one occasion when information was needed of what was transpiring in South Carolina, Nancy went to the Savannah river, procured two logs, and tied them with a grape-vine, thus constructing a raft. Upon this she crossed the river, obtained the desired information and returning communicated it to the Georgia troops.

At another time she defended successfully a small fort against the attack of a band of Tories and savages.

While Augusta was in the hands of the British, Nancy, assuming the garments of a man, went into the British camp at that post and, pretending to be crazy, obtained valuable information which she hastened to lay before the commander of the Georgia troops, then in Wilkes county, Colonel Elijah Clarke.

EMANUEL COUNTY.

Emanuel County was laid out from Bulloch and Montgomery in 1812, and was named after the Hon. David Emanuel, who was a brother-in-law of General John Twiggs, and fought bravely under him for the liberty of his country. He was several times a member of the legislature from Burke county and president of the Senate.

Emanuel county is bounded on the north by Burke and Jefferson

counties, on the east by Screven and Bulloch, southeast by Bulloch and Tattnall, southwest by Montgomery, west by Laurens and northwest by Johnson county. The Ogeechee river separates the county from Burke. The Cannouchee river flows through the center, the Ohoopee river through the western part. Along its western and southwestern border flows Pendleton's creek. Other streams are Yamgrandee, Sartain's and Tump's creeks. The rivers and streams supply abundance of fish.

The timbers are fine. The pine and cypress yield excellent lumber and shingles, which, with turpentine and rosin, are shipped in large quantities to Savannah. There are five turpentine distilleries and 10 lumber mills.

The land is level and along the rivers and creeks is productive. The average production per acre for the county is: corn, 12 bushels; oats, 10 to 20 bushels; field-peas, 10 bushels; ground-peas, 200 bushels; sweet potatoes, 150 bushels; seed cotton, upland, 500 pounds; sea-island cotton, 400 pounds; sugar-cane syrup, 500 gallons. According to the United States census of 1900 this county in 1899 produced 9,525 bales of upland and 4,062 of sea-island cotton. The summer range for cattle and hogs is excellent. Fine hay is made from pea-vine and grass. The grist-mills number 10.

In 1890 Emanuel county had 19,721 sheep, with a wool-clip of 53,955 pounds; 17,222 cattle, 478 working oxen, 5,251 milch-cows, 1,473 horses, 1,264 mules, 31,025 swine, and 81,343 poultry of various kinds. The number of goats is estimated at 200. There was also a production of 76,638 dozens of eggs, 14,928 pounds of honey, 377,608 gallons of milk and 57,968 pounds of butter. Vegetables and fruits are raised for home consumption.

The means of transportation and travel are by the Millen and Southern, Midville, Swainsboro and Red Bluff, Wadley and Mount Vernon, Stillmore Air Line, and the Pineora (now a part of the Central) Railroads, about 100 miles in all. The county roads are in good condition.

Swainsboro, the county site, is at the junction of the Midville, Swainsboro and Red Bluff Railroad, with the Stillmore Air Line. Here a new company is organized for the erection of a cotton-mill. There is one bank with a capital of \$50,000, and a court-house worth \$30,000.

Of the 15,000 bales of cotton shipped from the county, 5,000 are handled at Swainsboro.

Area, 936 square miles, or 599,040 acres by the census of 1900. Population of Emanuel county, 21,279; school fund, \$12,973.31; school fund of Adrian, \$583.19.

By the Comptroller-General's report for 1900 there are: acres of improved land, 405,424; of wild land, 115,675; average value per acre of improved land, \$2.04; of wild land, \$1.00; city property, \$197,365; money, etc., \$305,859; value of merchandise, \$117,286; stocks and bonds, \$3,035; cotton manufactories, \$21,000; iron works, \$500; household furniture, \$174,753; farm animals, \$338,457; watches and jewelry, \$8,176; plantation and mechanical tools, \$64,312; real estate,

\$1,142,710; personal estate, \$1,140,970. Aggregate value of whole property, \$2,283,680.

Property returned by colored taxpayers: number of acres of land, 22,625; value, \$43,117; city property, \$6,476; money and solvent debts, \$2,469; merchandise, \$200; household and kitchen furniture, \$12,837; watches, jewelry, etc., \$295.00; farm and other animals, \$27,142; plantation and mechanical tools, \$4,285; value of all other property, \$1,399; aggregate value of whole property, \$103,480.

The tax returns for 1901 show a gain in the value of all property over the returns of 1900, amounting to \$181,713.

There are 93 schools in the county belonging to the public school system, and the average daily attendance is 1,757 pupils in the 62 schools for whites, and 1,167 in the 31 schools for negroes.

Population of Emanuel county by sex and color, according to the census of 1900: white males, 6,598; white females, 6,275; total white, 12,873; colored males, 4,468; colored females, 3,938; total colored, 8,406.

The total population, 21,279, shows a gain of 6,576 over 1890.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 83 calves, 54 steers, 9 bulls, 111 dairy cows, 99 horses, 169 mules, 508 swine, 77 goats.

FANNIN COUNTY.

Fannin County was laid off from Union and Gilmer counties in 1856, and was named in honor of J. W. Fannin who, with his whole command, were put to the sword at Goliad while fighting for the freedom of Texas. It is bounded on the north by the States of North Carolina and Tennessee, east by Union county, southeast by Lumpkin, southwest and south by Dawson and Gilmer counties and west by Murray. Toccoa river rises in the southeastern part of the county and flows northward into Tennessee.

The Atlanta, Knoxville and North Georgia Railroad traverses the county dividing at Blue Ridge into two diverging branches, one going into Tennessee, the other into North Carolina. Thus the people enjoy facilities for travel and for shipping to market chickens, eggs, apples, and such other products as they may have for sale.

The lands are hilly and mountainous, and contain such minerals as gold and copper.

Blue Ridge is the county site, the court-house having been transferred to that point from Morganton in 1899.

The lands produce well, and with proper cultivation will yield per acre: corn, 15 bushels; oats, 20 bushels; rye, 12 bushels; wheat, 10 bushels; Irish potatoes, 100 bushels; sweet potatoes, 50 bushels; field-peas, 10 bushels; crab-grass hay, 1,500 pounds; clover, 1,200 pounds; corn fodder, 200 pounds; sorghum syrup, 75 gallons. The apples of this county are of superior flavor, and can be kept almost from one end of the year to the other.

By the census of 1890 there were in this county 7,826 sheep, with a wool-clip of 9,549 pounds; 6,949 cattle, 1,430 working oxen, 2,165 milch-cows, producing 641,893 gallons of milk and 146,974 pounds of butter, 71,897 poultry of all sorts with an egg production of 98,532 dozen. The county also produced 15,469 pounds of honey. There were also 749 horses, 386 mules and 11 donkeys.

The people are kind, hospitable and hardy. They manufacture at home most of their cloth, jeans and linsey, for winter wear, and live chiefly on home supplies.

The forest growth is white oak, post oak, hickory, ash, poplar, maple and other hardwoods and some pine.

The area of Fannin county is 390 square miles, or 249,600 acres. Population in 1900, 11,214; school fund, \$6,957.11.

By the Comptroller-General's report for 1900 there are: acres of improved land, 219,573; of wild land, 73,038; average value per acre of improved land, \$1.51; of wild land, \$0.30; city or town property, \$77,173; money, etc., \$72,625; value of merchandise, \$31,092; cotton manufactories, \$1,283; mining, \$60.00; household and kitchen furniture, \$39,066; farm and other animals, \$115,960; plantation and mechanical tools, \$15,256; watches, jewelry, etc., \$2,167; value of all other property, \$8,807; real estate, \$432,653; personal estate, \$288,519. Aggregate value of whole property, \$721,172.

Property returned by colored taxpayers: number of acres of land, 168; value, \$105.00; city or town property, \$425.00; money, \$1,200; household and kitchen furniture, \$549.00; watches, silver, etc., \$21.00; farm and other animals, \$482.00; plantation and mechanical tools, \$40.00; value of all other property, \$12.00. Aggregate value of whole property, \$1,646.

The tax returns for 1901 show an increase in the value of all property over that reported in 1900, amounting to \$86,858.

The public school system has 57 schools for whites, with an average attendance of 1,684 pupils, and 2 for colored with an average attendance of 48.

At Morganton, the former county site, is located the North Georgia Baptist College, which is doing a splendid work in that section. They and the Methodists are the leading denominations of the county.

The railroads have greatly developed the county in the last few years. The town of Blue Ridge, which in 1890 had only 264 inhabitants, had by the census of 1900 a population of 1,148, and the district of the same name had grown from 868 in 1890 to 2,048 in 1900.

The population of the county, which was 8,724 in 1890, was in 1900 11,214, an increase of 2,490.

Population of Fannin county by sex and color, according to the census of 1900: white males, 5,346; white females, 5,572; total white, 10,918; colored males, 143; colored females, 153; total colored, 296.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 34 calves, 12 steers, 4 bulls, 109 dairy cows, 47 horses, 19 mules, 2 donkeys, 6 sheep, 264 swine.

FAYETTE COUNTY.

Fayette County is a portion of the territory acquired by the United States for the use of the State of Georgia from the Creek Indians, by a treaty made at the Indian Spring. It was organized in 1821 and named in honor of the Marquis de la Fayette, the gallant French nobleman who so heartily espoused the cause of American freedom during the long struggle for independence. This county is bounded by the following counties: Campbell on the north, Clayton on the east, Spalding on the east and southeast, and Coweta on the west. Flint river divides it from Clayton and Spalding counties and Line creek from Coweta.

The Southern Railway traverses it from north to south, and a branch of the Central system crosses its southern part.

The face of the country is generally level. The soil is gray; the water pure, cool freestone.

Lands in this county yield per acre, under fair cultivation: seed cotton, from 800 to 1,200 pounds; corn, 20 bushels; oats, 25 bushels; rye, 8 bushels; barley, 10 bushels; wheat, 12 bushels; Irish potatoes, 250 bushels; sweet potatoes, 200 bushels; field-peas, 25 bushels; ground-peas, 50 bushels; crab-grass hay, 2,000 pounds; corn fodder, 350 pounds; sorghum syrup, 150 gallons; sugar-cane syrup, 250 gallons. But some of the lands under a state of scientific cultivation make 60 bushels of corn to the acre; 75 of oats; 30 of wheat; 1,500 pounds of seed cotton to the acre, and 400 gallons of cane syrup. Scientific or intensive farming will raise in like proportion the averages in every county in the State.

According to the United States census of 1900 the cotton ginned in the county for 1899-1900 was 9,449 bales, all upland.

Peaches and apples do well in this county. The Yates and Shockley apples, of which large quantities are raised, have proved very remunerative.

The county possesses abundant water-power and a fine supply of timber for building and mechanical purposes. Consequently there are many grist and sawmills.

By the census of 1890 there were in the county 163 sheep, with a wool-clip of 292 pounds; 2,843 cattle, 131 working oxen; 1,197 milch-cows with a production of 355,093 gallons of milk and 117,098 pounds of butter; 425 horses, 1,245 mules, 3 donkeys, 4,151 swine, 54,991 poultry of various kinds with a production of 70,625 dozen eggs. The county also produced 10,300 pounds of honey.

Fayetteville, the county site, is on a branch of the Southern Railway. Brook's station, Inman, Lowry and Woolsey, are some of the other post-offices.

The area of Fayette county is 215 square miles, or 137,600 acres. Population in 1900, 10,114; school fund, \$6,731.64.

By the Comptroller-General's report for 1900 there are: acres of improved land, 119,084; average value per acre, \$5.12; city property, \$46,325; money, \$37,309; merchandise, \$31,694; stocks and bonds,

\$500; cotton manufactories, \$690; iron works, \$110; household furniture, \$48,579; mining, \$25; farm and other animals, \$90,888; plantation and mechanical tools, \$25,362; watches, jewelry, etc., \$2,127; real estate, \$656,085; personal estate, \$264,737. Aggregate value of whole property, \$920,817.

Property returned by colored taxpayers: number of acres of land, 1,541; value, \$7,964; city property, \$550; money, etc., \$767; household furniture, \$4,199; watches, silver, etc., \$83; farm animals, \$6,128; plantation and mechanical tools, \$908. Aggregate value of whole property, \$21,780.

There are about 25,000 acres of forest in the county, with such trees as pine, oak, hickory, gum and poplar. About 20 small sawmills work this timber and prepare it for the market. At Fayetteville there is a small private bank, a court-house worth \$15,000, 2 life and fire insurance agencies and several successful stores. There are also 2 broom factories.

There are 43 schools belonging to the public school system of Georgia. The daily average attendance is 865 in the 27 schools for whites, and 300 in the 16 for negroes.

Methodists, Baptists and Presbyterians are the leading Christian denominations.

The Fayetteville district contains a population of 2,265, of whom 430 live in the town. The population of the county, 10,114, is a gain of 1,386 since 1890.

Population of Fayette county by sex and color, according to the census of 1900: white males, 3,254; white females, 3,299; total white 6,553; colored males, 1,788; colored females, 1,773; total colored, 3,561.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 63 calves, 33 dairy cows, 17 horses, 11 mules, 2 sheep, 74 swine.

FLOYD COUNTY.

Floyd County was laid out from Cherokee in 1832, and was named in honor of General John Floyd of Camden county, who was greatly distinguished for his victories over the Indian allies of the British in the war of 1812-1815. Floyd county is bounded on the north by Chattooga and Gordon, east by Gordon and Bartow, south by Polk, west by the State of Alabama and north-west by Chattooga county. The Etowah and Oostenaula rivers enter this county from different directions, and, uniting at Rome in the east central portion, form the Coosa, which flows westward into Alabama. The Etowah river is not navigable, but is a swift flowing mountain stream with immense water-powers that can be utilized for running factories and flour and grist mills. The Oostenaula is navigable for 105 miles northward and northeastward from the city. The Coosa is navigable for 250 miles below the city, and the United States government is making large appropriations to open it to the Gulf

of Mexico. The steamboats on these two rivers bring to Rome the productions of the Coosa Valley, consisting of lumber, iron, grain, cotton, and all those of the Oostenaula Valley, including large quantities of walnut, poplar and oak lumber.

Railroad transportation in the county is all that could be desired. The great Nashville, Chattanooga and St. Louis system comes in by the old Rome Railroad, now a branch of the Western and Atlantic (State road), connecting Rome with Atlanta on the south and Chattanooga on the north. The Southern Railroad, one of the greatest railway systems in the Union, goes through Rome, giving a connection on the north to Chattanooga and all points in the northwest, and through East Tennessee to all points northeast, including New York, Philadelphia and Washington City. One division of this same system goes from Rome southward to Atlanta, Macon, Brunswick and Savannah, and all points in Florida. The Alabama division of the Southern system connects Rome with lines at Anniston, Alabama, to Montgomery and Mobile, and also to Selma, Meridian, Vicksburg, New Orleans and all points south and west. The Rome and Decatur (Alabama), now operated by the Southern, runs through the valley of the Coosa to Gadsden and Attalla, Alabama. The old Chattanooga, Rome and Southern Railroad, now a part of the great Central of Georgia system, gives another connection to Chattanooga and the northwest, and also affords direct communication with Savannah and all points in Georgia and Florida. All these great arteries of freight and travel, meeting at Rome, make it one of the greatest railroad centers of the South. The miles of splendid macadamized county roads give to those citizens not living on any one of the numerous railroad lines easy access to their own thriving, growing city. Besides all these advantages an elegant electric street car system reaches out from the city to the suburbs, extending along the cardinal points of the compass.

Rome is not only the commercial, but also the manufacturing center of this part of the State. Among the important industries should be mentioned: the Rome Rolling Mill, making merchant bar iron and manufacturing cotton ties; Rome Foundry and Machine Works, Brick Works, Standard Scale Company, Stove works, Cotton factory, Rome Hollowware and Iron Factory, steam ginners, cotton compress, plow factory, gas works, electric light plant, electric street railroad, cotton seed-oil mills, ice factory, harness and saddle factories, 2 planing-mills, Garlock Rubber Packing Factory, steam tannery, a furniture factory, excelsior works, broom factory, mattress factory, carriage and wagon factory, acid phosphate works, and the Rome Charcoal Iron Furnace.

Besides the State public school system the city of Rome has an excellent system of its own, and Shorter College for young ladies.

Rome has a population of 7,291 by the census of 1900; but Rome district, which embraces the city and the towns of East Rome and North Rome with their respective suburbs, contains by the same census 14,035 inhabitants.

The soil of Floyd county is very productive, especially in the three great river valleys, producing in abundance cotton, corn and the small

grain and hay crops. Though the higher lands are less fertile, they are better adapted to the growing of such fruits as peaches, pears, plums, cherries and all varieties of berries. Apples flourish best on the lower lands. Upon the mountain tops grapes grow in great perfection.

With fair cultivation the lands yield to the acre: seed cotton, 1,000 pounds; corn, 25 bushels; oats, 25 bushels; wheat, 20 bushels; rye, 15 bushels; Irish potatoes, 200 bushels; sweet potatoes, 200 bushels; field-peas, 15 bushels; crab-grass and clover, each 5,000 pounds of hay; fodder, 600 pounds; sorghum syrup, 200 gallons. As in Bartow and Cobb, there are lands which yield 50 bushels of corn and 40 of wheat to the acre. Stock-raising and the improvement of the breeds is attracting considerable attention. There are excellent dairy farms in the county.

By the census of 1890 there were 3,623 sheep, with a wool-clip of 7,052 pounds; 10,352 cattle, 619 working oxen, 3,932 milch-cows with a production of 1,266,971 gallons of milk, from which were made 381,573 pounds of butter and 1,270 pounds of cheese. There were by the same census 137,106 poultry of all kinds with a product of 216,015 dozens of eggs. The honey produced amounted to 24,785 pounds. There were also in the county 1,519 horses, 2,118 mules, 11 donkeys, and 16,330 swine. Of the cattle 187 were pure bred and 909 were half blood and higher. These statistics do not include live stock in the city of Rome.

In minerals Floyd is rich. The following have been found: brown and red iron ores, manganese, bauxite, marble (variegated and black), slate, limestone, cement rock, lithographic stone, brown stone kaolin, ochre, brick clay, bituminous shale, extensive iron pyrite, gold, silver and lead.

Besides Rome, East Rome and North Rome, there is in the southwestern part of the county the growing town of Cave Spring, on one of the branches of the Southern Railway, 16 miles from Rome. It is situated in Van's Valley, one of the most charming in all Georgia. In the southeastern end of the town is a large limestone cave in the side of a well-wooded hill, from the foot of which is a spring of clear, mild limestone water, from which the town derives its name. At Cave Spring are located Hearn Institute, Hearn Female Seminary, Wesleyan Institute and the Georgia Academy for the Deaf and Dumb. Though the town proper had by the census of 1900 only 824 inhabitants, the Cave Spring district, which includes the town, contains a population of 2,283.

The Southern Manganese and Steel Company has completed at this town a \$20,000 plant for treating manganese, of which it produces 50 tons a day. An electric light plant is also approaching completion.

In the Lindale district, having a population of 2,643, is the great Lindale Cotton Factory, having 1,726 looms, 51,264 spindles and a capital of \$1,000,000. The proprietors have erected an elegant \$15,000 school building for the children of the operatives, and have fitted up a handsome library and reading-room, lighted by electricity, for the benefit of their employees. In the school building is a large, well-equipped lecture-room, elegant in all its appointments, lighted by electricity and suited to any kind of public entertainment.

Floyd county abounds in churches of the Methodists, Baptists, Presbyterians and Episcopalians. The Roman Catholics also are well represented. The Jews have a synagogue at Rome.

The area of Floyd county is 506 square miles, or 323,840 acres. The population by the United States census of 1900 was 33,113, an increase of 4,722 since 1890.

According to the report of the Department of Education the school fund of the county is, \$16,392.25; of the city of Rome \$5,186.02; of North Rome \$1,042.80.

According to the report of the Comptroller-General for 1900 the property returned for taxation is as follows: acres of improved land, 266,815; acres of wild land, 17,847; average value per acre of improved land, \$7.26; of wild land, \$0.80; city property, \$2,716,909; shares in bank, \$441,325; money, etc., \$815,427; merchandise, 513,115; tonnage, \$4,000; stocks and bonds, \$39,800; cotton manufactories, \$1,024,850; household furniture, \$306,542; iron works, \$1,600; mining, \$14,380; farm and other animals, \$301,472; plantation and mechanical tools, \$91,032; watches, jewelry, etc., \$39,144; value of all other property, \$60,293; real estate, \$4,669,618; personal estate, \$3,837,326. Aggregate value of whole property, \$8,506,944.

Property returned by colored taxpayers: number of acres of land, 12,884; value, \$43,071; household furniture, \$67,655; money, \$185.00; merchandise, \$1,155; farm and other animals, \$20,857; watches, silver, etc., \$238; plantation and mechanical tools, \$4,345; value of all other property, \$1,121. Aggregate value of whole property, \$168,057.

The tax returns for 1901 show a decrease in the value of all property of \$200,975 since the returns of 1900. The apparent decrease was probably owing to an error in the compilation of the returns, for Floyd is one of the most progressive counties of Georgia.

Colonel A. J. Pickett, whose researches into the early history of Georgia and Alabama are very interesting, came to the conclusion from a description written by one of De Soto's followers that Rome occupied the site of the Indian town called Chiaha. Here De Soto on his wonderful march from Florida across Georgia, Alabama and Mississippi, rested for 30 days, while men and horses recuperated and recovered strength.

According to the United States census of 1900, there were ginned in Floyd county during the season of 1899-1900, 11,864 bales of upland cotton.

In the public school system are 75 schools for whites and 33 for colored. The average attendance on the former is 1,748 pupils, and on the latter, 859. In the white schools of Rome are 997 pupils, and in the colored schools, 536.

Population of Floyd county by sex and color, according to the census of 1900: white males, 10,900; white females, 10,733; total white, 21,633; colored males, 5,651; colored females, 5,829; total colored, 11,480.

Population of the city of Rome by sex and color, according to the census of 1900: white males, 2,147; white females, 2,310; total white,

4,457; colored males, 1,243; colored females, 1,591; total colored, 2,834
Total population of Rome, 7,291.

Domestic animals in Floyd county, in barns and inclosures, not on farms or ranges, June 1, 1900: 276 calves, 122 steers, 749 dairy cows, 566 horses, 205 mules, 2 donkeys, 33 sheep, 812 swine, 19 goats.

FORSYTH COUNTY.

Forsyth County was laid out from Cherokee in 1834, and named after the Hon. John Forsyth, a native of Virginia, who came with his father to Georgia at four years of age, rose to prominence while a very young man, became attorney-general of Georgia, then representative in Congress, then senator, then Minister of the United States to Spain, again representative in Congress, next Governor of Georgia, then a second time its senator at Washington, and finally Secretary of State of the United States. This county is bounded by the following counties: Dawson on the north, Hall on the east, Hall and Gwinnett on the southeast, Milton on the south and Cherokee on the west. The Etowah river flows through its northwestern corner, while the Chattahoochee and one of its branches borders the county on the east and southeast. Tributaries of these rivers water the western and northern sections of the county. The bottom lands of the rivers are very fertile, and the valley lands also produce good crops of cotton, corn, wheat, rye, oats, tobacco, fruits and vegetables. The average production to the acre of the lands of this county under improved methods is about 25 bushels of corn, 25 of oats, 15 of wheat, 15 of barley, 10 of rye, 200 bushels each of Irish and sweet potatoes, 10 to 15 bushels of field-peas; 50 bushels of ground-peas; 500 pounds of seed cotton; 400 pounds of crab-grass hay, 1,000 to 1,500 pounds of Bermuda grass hay, 6,000 pounds of clover, 500 pounds of corn fodder and 100 gallons of sorghum syrup. The best hay made in the county is pea-vine mixed with sorghum and crab-grass. Vegetables of every kind, apples, peaches, plums and other fruits mature well and in great profusion. There are no fruit farms, but nearly all the farmers have orchards and sometimes carry a wagon load of apples to Atlanta. There are no dairy farms, but almost every family has one, and some, two or more, milch-cows. The Jersey is regarded as the best milker. The Durham and the Devon are preferred for beef. By the census of 1890 the cattle numbered, 4,985, of which 403 were working oxen, and 2,133 were milch-cows, yielding 602,371 gallons of milk, from which were made 210,081 pounds of butter and 75 pounds of cheese. The domestic fowls of all varieties aggregated 98,297 and produced 107,427 dozens of eggs. The honey collected amounted to 20,187 pounds. There are 820 horses, 1,460 mules, 8 donkeys and 7,683 swine. The sheep numbered 1,006, and yielded 1,293 pounds of wool.

For summer pasturage, Bermuda, crab-grass and broom sedge grasses are used; for winter, rye chiefly. The feed for cattle is pea-vine hay

forage, fodder, shucks, cotton seed, cotton seed-meal and corn meal bran.

The forest growth is chiefly second growth pine, hickory, and the varieties of oak. There are two small sawmills run by water and nine steam sawmills. Most of the mills are portable and saw by lots for those who use lumber. There are nine flour and grist-mills, and twelve corn mills. There is also in Forsyth county one tannery. The Chattahoochee river affords water-power sufficient for any number of factories.

According to the United States census of 1900 Forsyth county in 1899 ginned 7,449 bales of upland cotton.

Most of the products of the county are marketed at Buford, on the Southern Railway; some in Atlanta.

The climate is healthy, the water clear and pure. The people are kind and hospitable. There are public and private schools, and churches of the Methodists and Baptists. The latter are the most numerous. Hightower Institute is a Baptist school, and Hopewell Academy belongs to the Methodists.

Although no railroads traverse the county, the Southern runs within a few miles of its eastern boundary, the nearest point being at the south-east corner.

Cumming, the county site, named in honor of Colonel William Cumming of Augusta, is located on Vickery creek, 2½ miles from Sawnee Mountain, which is said to be rich in gold. Some mines in the county have yielded large amounts of gold. Some silver and copper have been found. Three hundred thousand dollars in gold has been taken from the Strickland mine, which is not now being worked. The Green mine near Coal Mountain, is a rich placer. It is being daily operated by a few men using primitive methods.

There is much beautiful scenery, especially in the vicinity of Cumming. This town has a population of 239, but the Cumming district, which includes it has 1,808 people.

In the schools of the public school system the average attendance is 1,398 in the 48 schools for whites and 115 in the 7 for negroes.

The area of Forsyth county is 252 square miles, or 161,280 acres. Population in 1900, 11,550, a gain of 395 since 1890; school fund, \$8,273.08.

By the Comptroller-General's report for 1900 there are: acres of improved land, 152,981; of wild land, 2,280; average value to the acre of improved land, \$4.03; of wild land, \$0.66; city property, etc., \$31,515; money, \$156,092; merchandise, \$46,294; household furniture, \$57,100; farm animals, \$141,237; plantation and mechanical tools, \$36,545; watches, jewelry, etc., \$1,863; value of all other property, \$24,846; real estate, \$772,715; personal estate, \$471,654. Aggregate value of whole property, \$1,244,369.

Property returned by colored taxpayers: acres of land, 1,991; value, \$6,320; money, \$285.00; city property, \$275.00; household furniture, \$1,469; watches, silver, etc., \$22.00; farm animals, \$3,482; planta-

tion and mechanical tools, \$554.00; value of all other property, \$102.00. Aggregate value of whole property, \$12,509.

The tax returns of 1901 show a gain of \$70,829 in the value of all property over the returns of 1900.

Population of Forsyth county by race and color, according to the census of 1900: white males, 5,161; white females, 5,306; total white, 10,467; colored males, 544; colored females, 539; total colored, 1,083.

No report of domestic animals in barns or inclosures, all being probably on farms or ranges.

FRANKLIN COUNTY.

Franklin County is one of the oldest in the State, and from it several counties have been formed. It was named in honor of Benjamin Franklin, who was born in Boston, Massachusetts, January 17, 1706. When a young man he removed to Philadelphia, Pennsylvania, and soon rose to prominence as a philosopher and a statesman. Through him was brought about the treaty of alliance with France in 1778, and he was one of the commissioners who negotiated with England the final treaty of peace.

Franklin county is bounded on the northeast by South Carolina, from which it is separated by the Tugaloo, a branch of the Savannah river; on the east by Hart county, on the south by Madison county, on the west by Banks county and northwest by Habersham.

On its southern border flows Hudson's Fork, commonly called Hudson river, a tributary of Broad river, which empties into the Savannah on the border of Elbert and Lincoln counties. North Fork and Middle Fork, tributaries of Broad river, flow through the county. The lands along the rivers and creeks are rich and produce abundant crops of cotton, corn and the small grains, as well as a great variety of vegetables. The average yield to the acre under good cultivation is: seed cotton 600 to 800 pounds; corn, 15 bushels; wheat, 10 bushels; rye, 10; oats, 20 to 30; Irish potatoes, 100; sweet potatoes, 100; crab-grass hay, 2,000 pounds; Bermuda grass 4,000 pounds; shredded corn, 4,000; sorghum syrup, 75 to 100 gallons.

In 1890 there were in the county 1,669 sheep, with a wool-clip of 2,491 pounds, 5,940 cattle, of which there were 630 working oxen, 2,227 milch-cows, producing 730,701 gallons of milk, 232,615 pounds of butter, and 25 pounds of cheese. There were also 108,222 of all kinds of poultry, producing 72,307 dozens of eggs. The honey produced amounted to 18,939 pounds. There were also 990 horses, 1,323 mules, 3 donkeys and 7,763 swine.

The forest growth is chiefly of hardwoods, viz.: the different varieties of oaks, hickory, maple, ash, birch, gum and other trees common to this section of the State.

The climate of Franklin county is pleasant and healthy. The people are industrious, kind-hearted and hospitable. Methodists and Baptists

are the most numerous of the Christian denominations, though there are also many Presbyterians and a few of other sects.

There are some good private schools besides the excellent ones belonging to the system provided by the State. In the 50 public schools for whites there is an average attendance of 1,753 pupils, and in the 19 for negroes an average attendance of 529.

According to the United States census of 1900 there were ginned in this county 13,998 bales of upland cotton, representing very nearly the entire production of the county for 1899.

Carnesville, named for Thomas B. Carnes, an eminent lawyer and judge, is the county site, located about ten miles from one of the branch roads of the Southern Railway system. It has, according to the United States census of 1900, a population of 305 in the corporate limits, and in the entire Carnesville district, 2,202. The Franklin Springs are about 9 miles southeast of Carnesville.

The largest town in the county is Lavonia, in Bryant district, which contains a population of 2,093, while in the town there are 699 inhabitants. It is on a branch of the Southern Railway between Toccoa and Elberton, and being on a ridge leading from the base of the Blue Ridge, has a delightful summer climate. On either side are fruitful plains yielding cotton, corn, wheat, oats, peaches, etc., one plain stretching toward the Tugaloo river on the north, the other toward the Broad on the south.

The business portion is built of brick. There are several manufacturing establishments: the Lavonia Oil Mill, with \$25,000 capital; the Lavonia Milling Company, a modern roller flouring mill with \$10,000 capital; the Lavonia Gin Company with a capital of \$10,000; Stevenson's Brick Mills with an output of 50,000 first-class brick in a day; Mason, Randall & Co's. lumber yard and sawmills with dressers and other modern equipments, and the Lavonia Cotton Mill, with a capital of \$65,000. There are in the town 2 hotels; Methodist, Baptist and Presbyterian churches, the Lavonia Institute, a \$4,000 brick building, well patronized and the Bank of Lavonia, with a capital adequate to the needs of the community.

Another town is Royston, on the Southern Railway, with 579 inhabitants in the corporate limits, while in the Manley district, which includes it, are 1,321 people. This town has four fertilizer establishments which carry on a successful business. It is also well supplied with religious and educational advantages.

Other postoffices are Ashland, Avalon, Bold Spring, Mize, Cromer, Eastonollee, Garlandville, Goodwill, Henry, Iron Rock, Martin, Red Hill, Salubrity, Walnut Hill and West Bowersville.

The area of Franklin county is 344 square miles, or 220,160 acres.

By the United States census of 1900 the population was reported at 17,700, a gain of 3,030 over that of 1890.

According to the report of Hon. G. R. Glenn, State School Commissioner, the school fund of Franklin county for 1900 was \$11,919.66.

By the report of Hon. W. A. Wright, the Comptroller-General, the following items were returned for taxation in 1900: acres of improved

land, 195,179; average value per acre, \$4.71; city or town property, \$132,503; shares in bank, \$12,000; money and solvent debts, \$180,074; value of merchandise, \$67,241; cotton manufactures, \$15,000; household and kitchen furniture, \$81,472; farm and other animals, \$186,511; plantation and mechanical tools, \$46,616; watches, jewelry, etc., \$3,151; cotton, corn, annual crop, etc., \$9,255; value of all other property, \$39,590; real estate, \$1,090,075; personal estate, \$641,372. Aggregate value of whole property, \$1,731,447.

Property returned by colored taxpayers: number of acres of land, 2,626; value of land, \$9,539; city or town property, \$1,263; money and solvent debts, \$157; merchandise, \$208; household and kitchen furniture, \$4,740; watches, jewelry, etc., \$68.00; farm and other animals, \$10,894; plantation and mechanical tools, \$2,071; value of all other property, \$1,492. Aggregate value of whole property \$30,432.

The tax returns for 1901 show an increase of \$119,789 over the returns of 1900.

One of the early settlers of this county was Captain James Terrell, who died in the 77th year of his age. During the Revolutionary struggles, though living in the midst of royalist neighbors, he was among the first to embrace the cause of America, and served with distinction until disabled by a musket ball which shattered his hip.

There are in Franklin county several Indian mounds. This section of the State was long exposed to the ravages of the Indians. In almost every part of it the settlers found it necessary to erect forts and block-houses to protect themselves against the savages who, whenever opportunity offered, inflicted upon helpless women and children cruelties, the very record of which would chill the blood. The remembrance of these things was still fresh, when in 1837 the Creek warriors in Alabama gathered to do battle against the whites. One of the most gallant companies that volunteered for this war was from Franklin county, and was commanded by a Captain Morris. At the battle of Pea River Swamp in Alabama (March 25, 1837), the Franklin Volunteers greatly distinguished themselves. One of their number, after the Indians had been routed, while pursuing a fleeing savage, got into their camp when two Indian women seized him. Disdaining to strike a woman, he made every effort to escape, but finally when they were about to dispatch him with knives, he drew his bowie, and killing them both made good his escape.

Population of Franklin county by sex and color, according to the census of 1900: white males, 6,783; white females, 6,713; total white, 13,496; colored males, 2,146; colored females, 2,058; total colored, 4,204.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 40 calves, 14 steers, 1 bull, 123 dairy cows, 81 horses, 24 mules, 1 donkey, 7 sheep, 179 hogs.

FULTON COUNTY.

Fulton County was set off from DeKalb in 1853 and was named in honor of Robert Fulton, of New York, who first demonstrated the fact that steam could be used in the propulsion of vessels large enough to carry freight and passengers, (1807). This county is bounded on the north by Milton and Cobb, on the east by DeKalb, on the south by Clayton and Campbell and on the west by Campbell and Cobb.

The Chattahoochee river flows along its northern and western border. South river, one of the headwaters of the Ocmulgee, rises in the southern part of this county. Other streams are Peachtree, Clear, Woodall, Shoal, Proctor's, Sugar and Utoy creeks.

The face of the country is rolling and broken. The soil is red clay, interspersed with gray, gravelly ridges and bottoms.

The average yield of the various crops to the acre is: Seed cotton, 700 to 800 pounds; corn, 19 to 20 bushels; oats, 24 bushels; rye, 13 bushels; wheat, from 6 to 10 bushels; hay, 4,000 pounds. The grasses from which hay is made, are clover, blue grass, Bermuda, crab, orchard, red top, timothy and peavine. All these do well. There is an annual product of about 7,000 bushels of cowpeas, 500 bushels of peanuts, 52,000 bushels of Irish potatoes, 124,000 bushels of sweet potatoes. The proximity of Atlanta causes a great demand for vegetables, and the amount of truck sold from the market gardens is valued at \$150,000. There are in Fulton county 47,000 peach-trees, 1,500 cherry-trees, 25,700 apple-trees, 1,700 pear-trees and 2,356 plum-trees.

The suburbs of Atlanta enjoy unrivalled advantages for profitable dairying, bee-keeping, poultry farming and trucking, and there is a steady growth all along these lines of industry.

By the census of 1890 there were 157 sheep, with a wool-clip of 487 pounds; 3,291 cattle, of which 72 were working oxen, and 1,839 were milch-cows, producing 817,310 gallons of milk from which were made 201,435 pounds of butter. There were reported 649 horses, 1,112 mules, 4 donkeys, 3,617 swine, 56,969 poultry of all kinds, 146,074 dozens of eggs and 16,812 pounds of honey. Of the cattle 380 were recorded as pure bred and 890 were graded as half blood or higher.

In these statistics horses and mules in the city of Atlanta were not recorded, but only those on farms.

The minerals are some copper, iron pyrites, asbestos and gold. None are being mined. The clays for making brick and terra cotta are profitably worked.

The timber products are small; some oak and walnut, used in shops which manufacture various articles of wood work. The output of lumber, shingles, staves, etc., amounts to about \$8,000 per annum.

The gross horse-powers of the Chattahoochee not utilized are 31,677. The utilized water-powers are: On the Chattahoochee 159, running 14 small grist-mills; on South river 33, running 3 small grist-mills.

In the city of Atlanta is one of the largest steam flour mills in Georgia, with patent roller process.

The county site and also the capital of Georgia is Atlanta, with a population in the city limits, according to the United States census of 1900, of 89,872, or in round numbers, 90,000. If we add to these figures the population of the immediate suburbs, we would have over 103,000 people whose living depends upon the various industries of the City of Atlanta. Besides these, many of the business men of Atlanta have their homes in the small cities, towns and villages scattered about within a radius of 20 and more miles in every direction, going to their homes every evening and returning in the morning, on numerous lines of steam or electric railways. Although the youngest of all the great commercial centers of Georgia, Atlanta is now the largest city between Washington, D. C., and New Orleans, La.

In 1837 the southeastern terminus of the Western and Atlantic Railroad was established near where the union passenger depot now stands (1901). It was chosen as being the best point for "the running of branch roads to Athens, Madison, Milledgeville, Forsyth and Columbus." Terminus was the name given to the site thus chosen. In 1843 the village was called Marthasville, in compliment to the daughter of ex-Governor Lumpkin, who had been distinguished by his deep interest in the development of railroad enterprise in Georgia. In 1846 Atlanta, derived from the word Atlantic, was suggested as an appropriate name for the embryo city, by Mr. J. Edgar Thomson, chief engineer of the Georgia Railroad, in a letter to Mr. Richard Peters, also an engineer of the road. Mr. Peters and Mr. Garnett decided upon this name, and on the 29th of December, 1847, the Georgia legislature incorporated, as the "City of Atlanta," the new town, which had begun to give evidence of rapid growth. The population at that time numbered about 500. By the census of 1850 the population was shown to be 2,572. Up to 1853 the people of Atlanta went to Decatur to transact their legal business; but in that year the county of Fulton was formed with Atlanta as its county site, and a city hall was erected where the State Capitol now stands. It was about this time that Rev. George White was superintending the publication of his "Historical Collections of Georgia," in which appears a statement from Mr. Jonathan Norcross to the effect that the population of Atlanta was not then precisely known, "but placed by none under 4,500, and still increasing." When the census of 1860 was taken, Atlanta was shown to have 9,554, or in round numbers, 10,000 inhabitants. During the civil war Atlanta was the seat of important industries, whose principal object was to sustain the military operations of the Confederate States. In July, 1864, Atlanta and vicinity became the scene of a fierce struggle between opposing armies and the battles of Peachtree Creek, Atlanta and Ezra Church were fought without decisive results. On August 6th another fierce engagement occurred between portions of each army at Utoy creek. From the 9th to the 25th of August the city was subjected to a furious bombardment, and women and children had to seek shelter in cellars night and day. But

the women and children had the spirit of heroes, to which General Hood bore testimony in these words, "I can not recall one word from their lips expressive of dissatisfaction or willingness to surrender." When all his efforts to capture Atlanta by direct attack had failed, General Sherman moved the bulk of his army to Jonesboro, across the only line of supply in possession of the Confederates. Then Hood, being unable to dislodge him, was compelled to let go, and Sherman entered Atlanta on the 2d of September, 1864. When he started on his march to the sea, Sherman ordered everything burned except the mere dwelling houses and the churches. Only 450 houses, including some of the churches, escaped. All the stores, workshops, mills, depots and most of the dwellings were reduced to ashes. The city just before its capture had 14,000 inhabitants. Before the close of hostilities, in the following spring, the people began to return and prepared to rebuild the ruined city. By 1870, a little over five years from the time of its destruction, Atlanta had arisen from her ashes and had a population of 22,000. In 1880 it had increased to 37,000, and in 1890 to 65,533. This growth from less than 3,000 in 1850 to 90,000 in 1900 has no parallel outside of the Northwestern States.

Nearly 1,100 feet above sea level, Atlanta has a bracing atmosphere, with breezes blowing over the foothills of the Blue Ridge.

The public buildings, whose cost aggregates nearly \$8,000,000, are imposing structures, and the business edifices compare favorably with them. Few cities in any part of the United States can show more attractive residence streets or more beautiful homes; and by the United States census Atlanta is accredited with a larger percentage of home owners than any city of its size in the Southern States. The streets are well paved, and macadamized roads extend far out from the city limits into the country.

The city is supplied with water works, gas and electric light plants, street and suburban electric railways, long distance telephones to the leading cities and towns of the State, and other great cities in different sections of the Union, and enjoys telegraphic communication with every quarter of the globe.

With no advantage of water transportation Atlanta enjoys, through her magnificent railroad connections, a great trade north, south, east and west. In several specialties the trade of Atlanta extends throughout the United States. This is particularly true of cotton and paper bags, furniture and proprietary medicines.

Groceries and dry goods are the two largest items in Atlanta's wholesale trade. The sale of groceries for 1899 amounted to over \$12,000,000 and those of dry goods to \$10,000,000.

In Atlanta and vicinity there are 9 cotton mills, and the Atlanta woolen mill, with an aggregate invested capital of \$1,860,000; 13 iron manufactories, making machinery, agricultural implements, boilers, gins and castings, with a capital of \$1,467,000; 12 manufactories of sash, doors, blinds and interior finish, with a capital of \$694,000; 5 establishments working in sheet metal, producing cornices, wirework and tinware,

with a capital of \$222,000; 8 making brick, tile and terra cotta, from clay, with a capital of \$301,000; 10 manufactories of commercial fertilizers, with a capital of \$1,215,000 in operation and a new plant approaching completion; 5 wagon and carriage factories, with a capital of \$126,000; 14 manufactories of proprietary medicines, with a capital of \$248,000; 13 furniture factories, with a capital of \$532,000; 7 candy and cracker factories, with a capital of \$235,000; 10 tobacco factories, with a capital of \$38,000; 3 coffin factories, with a capital of \$260,000; 6 bottling and carbonating establishments, with a capital of \$53,000; 5 paper and paper bag factories, with a capital of \$480,000; 4 paint and oil manufactories, with a capital of \$114,000; 4 of cotton seed oil and by-products, with a capital of \$750,000; 1 ice factory, with a capital of \$140,000; 26 miscellaneous establishments representing \$718,000. The aggregate invested capital of all these establishments is \$9,454,000. Besides these are nearly 400 small manufactories of various articles not estimated. The manufactories above enumerated employ more than 10,000 operatives, with an annual payroll of over \$3,000,000. The value of the raw material consumed is more than \$10,000,000, and the product between \$15,000,000 and \$20,000,000. The factories of Atlanta take the cotton crop of four average Georgia counties.

The lumber interest is the third largest in the south. The raw material consumed by the lumber mills amounts to \$500,000, and has a market value, when manufactured, of \$1,500,000.

The tanning industry is yet in its incipency, but the quality of the goods produced is of such a high standard, that they are always in demand at high prices.

There are in Atlanta 20 banking institutions, with a capital of more than \$3,000,000.

There are upwards of 20 building and loan associations representing nearly \$2,000,000 capital.

The hardware business of Atlanta amounts to something more than \$6,000,000 annually.

The largest wholesale and retail seed growing establishments in the south are located in Atlanta. They grow their own seed and guarantee them.

In fire insurance Atlanta has long led all other Southern cities. Here is the home of the Southeastern Tariff Association, which is composed of 60 of the leading fire companies doing business in the south. It has in the last 15 years done a splendid work in equalizing rates, liberalizing policies, driving out irresponsible agents and wild cat companies and improving building laws. Sixty companies through their Atlanta agencies report Georgia business for the year ending April 30th, 1900, as follows: New business written, \$184,000,000; premiums received, \$2,400,000; losses paid, over \$2,000,000. The Georgia Insurance Commissioner's report shows that 28 accident, marine, guarantee and plate glass companies, through their Atlanta agents, report Georgia business for the year ending April 30th, 1900, amounting to \$75,000,000, with

premium payments of \$260,000, and losses paid \$144,000. For the same period 36 old line life insurance companies, through their Atlanta offices, report new business written in Georgia \$28,000,000; new premiums collected, \$800,000; total business now in force, \$113,000,000, with annual premiums of \$3,163,000, and annual death claims of \$1,500,000. Assessment and fraternal companies add greatly to the above amounts. All this immense business aggregates in Georgia \$300,000,000, with annual premium payments of \$6,000,000 and annual losses of \$4,000,000.

The sanitary, police and fire departments of Atlanta are in first class condition, and no city in the Union surpasses her in these respects.

The hotels are numerous and first-class in their appointments.

Atlanta's public school system is up to the highest mark.

The churches and religious organizations represent every Christian denomination and Hebrews also. The churches number more than 100, and have large memberships.

Atlanta is surrounded by springs of great medicinal value, some of them in Fulton and some in adjacent counties. The Lithia waters of Georgia are of a superior quality and are claimed by some to excel those of any other State. They are sold in Atlanta at all soda fountains; they are barrelled and bottled and shipped to all points. The springs all have headquarters here. The waters have been found very beneficial, and a great many citizens of Atlanta drink nothing but lithia water.

Atlanta has several business and medical colleges, a law college and two dental colleges.

In addition to the day schools, public and private, there is a large night school connected with the public school system, and one under the auspices of the Young Men's Christian Association. The colleges of Atlanta have already been mentioned in the chapter on education in Georgia.

In 1870 the taxable property of Atlanta was returned at \$9,500,000, and in 1901 at \$47,986,535. Of this amount the whites own \$47,097,550 and the negroes \$888,985.

Atlanta's railroad facilities have already been referred to. The Southern, the Georgia, the Seaboard Air Line and the Central of Georgia connect her with the Middle, Northern and New England States. The Western and Atlantic, the Atlanta, Knoxville and Northern, and that branch of the Southern system formerly called the East Tennessee, Virginia and Georgia bring her into close communion with the entire country between the Alleghany and Rocky Mountains, and the region of the great lakes. That branch of the Southern, once known as the Georgia Pacific, and the Atlanta and West Point, connect her with the great Southern transcontinental lines to the Pacific and to Mexico. The Central of Georgia, the Atlanta and West Point and two branches of the great Southern system connect her with the South Atlantic and Gulf States.

Her miles of well-built business streets radiating in all directions, her handsome residence streets, the beautiful parks in the suburbs, reached

by the electric railways, make Atlanta a very attractive city, as well as a great mart of trade.

Atlanta is not only the county site of Fulton county, but also the capital of the State of Georgia. The capital was brought here from Milledgeville when the city was barely out of the ashes of the war, and in 1877 the people of Georgia voted to make Atlanta their permanent seat of government. The handsome capitol was erected on a lot given by the city during the incumbency of Governor McDaniel, and cost \$1,000,000. It is one of the few public buildings erected in the United States that came within the appropriation set apart by the legislature for its construction.

The rapidly developing business and manufactures of Atlanta were brought prominently before the whole country by the Cotton Exposition of 1881, and the great development of the Southeastern States between 1880 and 1890 was splendidly illustrated in the great Cotton States and International Exposition of 1895.

One of the new enterprises of Atlanta is a large plant for the manufacture of genuine all woven Smyrna rugs of imported material. The Atlanta Rug Mill, though of recent origin, has already doubled its capacity and has additional machinery ordered to still farther enlarge its output.

East Point, six miles from Atlanta, has a wagon factory and a horse collar factory. A little beyond East Point are two new cotton mills.

According to the United States census of 1900 during the season of 1899-1900 there were ginned in Fulton county 1,604 bales of upland cotton.

The business of the county is mostly in manufactures and commerce for the city, and in truck farming and dairying for the country.

The area of Fulton county is 174 square miles, or 111,360 acres.

Population of Fulton county in 1900, 117,363, an increase of 32,708 since 1890; school fund for county, \$13,747.71; school fund for city of Atlanta, \$39,672.23; school fund for East Point, \$778.31; school fund of Hapeville, \$325.

By the Comptroller-General's report for 1900 there are: Acres of improved land, 95,537; average value per acre, \$41.28; city and town property, \$32,621,690; gas and electric light company, \$450,000; building and loan associations, \$211,410; money, etc., \$3,924,828; shares in bank, \$1,149,150; stocks and bonds, \$1,190,351; cotton manufactories, \$461,346, which should be more than \$1,000,000, a mistake arising from more than \$600,000 worth of factory stock having been reported under the head of "all other property"; iron works, \$49,955; mining, \$735; merchandise, \$3,369,821; household furniture, \$1,375,658; farm and other animals, \$201,394; plantation and mechanical tools, \$99,313; watches, jewelry, etc., \$126,252; value of all other property, \$982,523; real estate, \$36,564,688; personal estate, \$14,926,354; aggregate value of property, \$51,491,042.

Property returned by colored taxpayers: Acres of land, 1,037; value of same, \$93,618; city and town property, \$787,875; money, etc., \$1,-

750; merchandise, \$8,720; watches, jewelry, etc., \$470; household furniture, \$31,620; farm and other animals, \$7,635; plantation and mechanical tools, \$1,954; value of all other property, \$1,090; aggregate value of property, \$934,732.

The tax returns for 1901 show an increase over those of 1900, in the value of all property, amounting to \$910,843.

The county public schools number 27 for whites, with an average attendance of 1,550, and 10 for colored, with an average attendance of 525. In the public schools of Atlanta there is an average attendance of 6,900 in those for whites and 2,700 in those for colored. The enrollment in Atlanta schools is 9,902 whites and 3,735 colored.

Besides Atlanta there are in Fulton county the following towns:

College Park, with a population of 517.

East Point, with a population of 1,315.

Hapeville, with a population of 430.

Oakland City, with a population of 823.

Of the immediate suburbs of Atlanta Cooks has 6,558 people, Black Hall, including Oakland City, 3,226; Edgewood, 1,552, and Peachtree 2,217, or 13,553 in all. This gives for Atlanta and its immediate suburbs a population of 103,425.

Population of Fulton county by sex and color, according to the census of 1900: white males, 35,334; white females, 36,257; total white, 71,591; colored males, 19,484; colored females, 25,924; total colored, 45,772.

Population of the city of Atlanta by race and color, according to the census of 1900: white males, 26,434; white females, 27,471; total white, 53,905; colored males, 14,943; colored females, 21,024; total colored, 35,967.

Total population of Atlanta, 89,872.

Domestic animals in Fulton county in barns and inclosures, not on farms or ranges, June 1, 1900: 381 calves, 45 steers, 28 bulls, 2,800 dairy cows, 2,797 horses, 982 mules, 3 donkeys, 2 sheep, 952 swine, 100 goats.

Domestic animals in the limits of the city of Atlanta in barns and inclosures, June 1, 1900: 161 calves, 23 steers, 6 bulls, 1,132 dairy cows, 2,227 horses, 614 mules, 1 donkey, 2 sheep, 4 swine, 56 goats.

GILMER COUNTY.

Gilmer County was laid out from Cherokee in 1832, and was named in honor of George R. Gilmer, Governor of Georgia from November, 1829, to November, 1831. It is bounded by the following counties: Fannin on the north and northeast, Dawson on the southeast, Pickens on the south, Gordon and Murray on the west.

The Cartecay and Ellijay rivers uniting at Ellijay in the center of the county form the Coosawattee river, which flows across the county in a southwesterly direction. It is also watered by Mountain Town creek, Owltown creek and many smaller streams.

The face of the country is broken by mountains, the principal of

which are Cohutta, Frog, Coal, Bald, Long Swamp, Amicalola, Turnip Town, Tallona and Sharp Top.

In the valleys and along the water courses the lands are very rich, the soil being a black sandy loam. The hilly uplands have a mulatto top soil with red clay subsoil, and in some places a gray gravelly soil. The mountain lands are very similar to the valley lands. The principal crops are best shown by comparing the acreage of each, which is as follows: Cotton, 100 acres; corn, 40,000 acres; wheat, 10,000; oats, 2,000; rye, 2,000; rice, 10 acres; sorghum, 100 acres; Irish potatoes, 500; sweet potatoes, 100; field peas, 1,000; garden vegetables of every kind, 100.

The average yield of these crops to the acre is: Corn, 25 bushels; oats, 12; wheat, 10 to 15; rye, 8 to 10; Irish potatoes, 100 to 150; sweet potatoes, 100; field-peas, 10; 100 gallons of syrup. Red top, timothy, Bermuda, crab-grass, orchard, blue grass and clover do well. The production of crab-grass hay is 2,000 pounds, of clover, 4,000 pounds, of corn fodder 300 pounds.

By the census of 1890 there were in this county 8,446 sheep, with a wool-clip of 13,277 pounds; 8,020 cattle, 1,708 working oxen; 2,389 milch-cows, with a butter production of 131,553 pounds, and a milk production of 649,587 gallons; 75,000 of all kinds of poultry, with a product of 150,000 dozens of eggs. There were also 10,000 hogs, and other animals were 687 horses, 458 mules and 11,478 hogs.

The honey produced in Gilmer county amounted to 29,615 pounds. Last year it was estimated that there were in this county 30 donkeys and 500 goats.

Small game is plentiful and the streams furnish the people with fish.

Vegetables of all kinds do well. This is also a good county for fruit. Apples grow to perfection and have a ready and profitable sale. Peaches do well, but do not have much of a market. Quinces, plums and cherries are grown, but not to any great extent. Some farmers have small vineyards that produce excellent grapes. The fruit business is in its infancy, but intelligent people in the county believe that it will prove very profitable.

The lumber, mostly oak and poplar, is being cut out in large quantities. It is estimated that the annual output of lumber is 10,000,000 superficial feet at an average price of \$15 a thousand feet.

At Ellijay is a large new lumber mill run by water, using 400 horse-power, and with a capital of \$100,000 and a capacity of 50,000 feet per diem.

There are in the county six flour and grist-mills run by water-power with an aggregate invested capital of \$10,000. There are also several small portable sawmills. There is a wagon factory at Ratcliff and two tanneries at Ellijay. The streams afford fine water-powers, and those within a few miles of Ellijay are estimated at nearly 1,000 horse-powers.

Gold and iron are being mined to a considerable extent.

Beautiful marble, white and variegated, limestone, sandstone, mica, slate and granite are found.

Ellijay, on the Atlanta, Knoxville and Northern Railroad, is the county site. It has a court-house which cost \$10,000. The Ellijay district has a population of 2,472, of whom 581 live in the town.

Methodists and Baptists are the prevailing Christian denominations. The schools are in good condition and well attended. The average attendance on the public schools is: in the 51 white schools 1,210 and in 1 for colored 18.

By reason of its healthful climate, pure water and mineral and agricultural resources this is a very attractive and inviting section of the State.

The area of Gilmer county is 450 square miles, or 288,000 acres.

Population in 1900, 10,198, a gain of 1,124 since 1890; school fund, \$6,974.45.

By the Comptroller-General's report for 1900 there are: improved lands, 256,549 acres; wild lands, 41,786; average value of improved lands per acre, \$1.39; of wild lands, \$0.51; city property, \$61,019; money, etc., \$60,289; merchandise, \$25,815; manufactures, \$7,343; household furniture, \$34,935; farm and other animals, \$113,752; plantation and mechanical tools, \$16,731; watches, etc., \$2,664; value of all other property, \$11,752; real estate, \$440,565; personal estate, \$275,555; aggregate property, \$716,120.

Property returned by colored taxpayers: Acres of land, 672; value, \$602; city property, \$10; household and kitchen furniture, \$70; watches, etc., \$15; farm and other animals, \$321; plantation and mechanical tools, \$113; value of all other property, \$25; aggregate property, \$1,156.

The tax returns for 1901 show an increase of \$11,475 in the value of all property over the returns of 1900.

Population of Gilmer county by race and color, according to the census of 1900: white males, 5,069; white females, 5,052; total white, 10,121; colored males, 37; colored females 40; total colored, 77.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: no report.

Ellija, an Indian town, formerly stood where Ellijay now stands. White Path, a chief of this town, accompanied John Ross to Washington in 1834. General Jackson invited him to dinner and presented him with a silver watch, which he always kept as a precious treasure. On his death his watch was sold and the proceeds appropriated to the erection of a marble monument.

Talona was south of Ellija. It was sometimes called Sanderstown after its principal chief, George Sanders, who kept a house of entertainment on the Federal road. He also went on a visit to Washington with John Ross.

This John Ross was the man after whom Ross's Landing (now Chattanooga) was called.

GLASCOCK COUNTY.

Glascok County was laid out from Warren county in 1858 and was named for General Thomas Glascock, Speaker of the House of Representatives of the State Legislature and Representative in Congress from 1835 to 1838. Glascock county is bounded by the following counties: Warren on the northeast and northwest, on the southeast Jefferson, and on the southwest Washington.

The north fork of the Ogeechee river runs along its southwestern border, while Comfort, Rocky and other creeks coming from the northeast and northwest flow centrally through the county, emptying into the Ogeechee river. These streams afford a quantity of fish and sport to those fond of the seine or hook and line.

The lands, with fairly good culture, will yield to the acre: seed cotton, 750 to 800 pounds; corn, 10 bushels; wheat, 10 bushels; oats, 20 bushels; Irish potatoes, 50 to 75 bushels; sweet potatoes, 125 bushels; field-peas, 10 bushels; ground-peas, 30 bushels; corn fodder, 200 pounds; sugar-cane syrup, 250 to 300 gallons.

By the census of 1890 there were 478 sheep, with a wool-clip of 923 pounds; 1,667 cattle, of which there were 120 working oxen and 567 milch-cows. There was a production of 94,337 gallons of milk and 25,202 pounds of butter; 19,299 of all kinds of poultry, with a product of 20,653 dozens of eggs. The honey produced amounted to 8,662 pounds. There were also 240 horses, 468 mules and 6,152 swine.

The timber growth is like that of this section of Georgia, oak, walnut, pine, chestnut, hickory, maple and gum.

Facilities for travel and transportation are furnished by a branch of the great Southern system, which brings Gibson, the county site, into close connection with Augusta, the chief city of that section of Georgia.

According to the United States census of 1900 during the season of 1899-1900 there were ginned 3,902 bales of upland cotton.

The area of Glascock county is 85 square miles, or 60,800 acres.*

Population in 1900, 4,516, a gain of 796 since 1890; school fund, \$2,952.81.

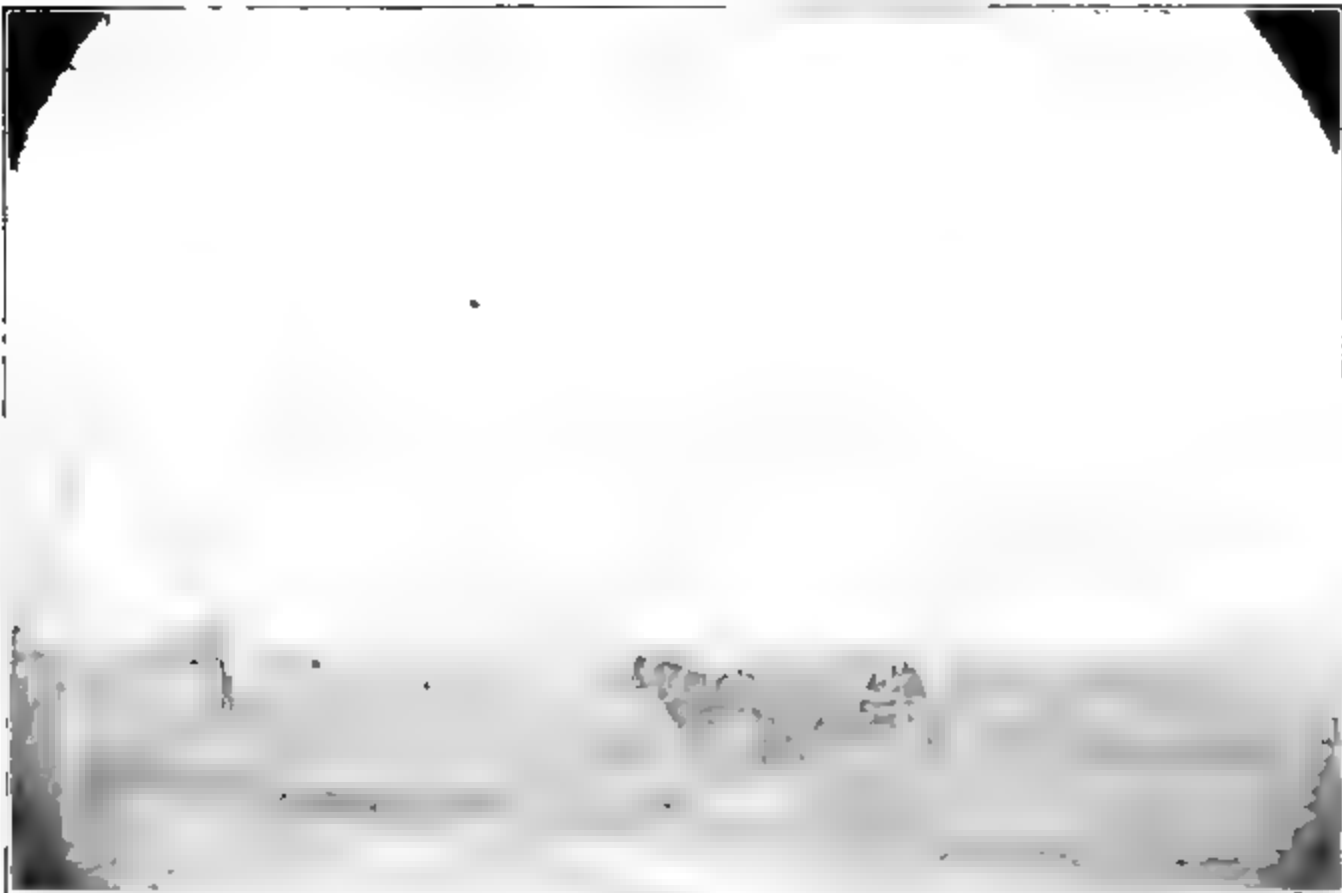
By the Comptroller-General's report for 1900 there are: acres of improved land, 81,771; of wild land, 1,326; average value per acre of improved land, \$2.96; of wild land, \$0.89; city property, \$38,415; money, etc., \$60,525; value of merchandise, \$20,125; household furniture, \$26,095; farm and other animals, \$55,018; plantation and mechanical tools, \$20,815; watches, jewelry, etc., \$1,363; value of all other property, \$1,600; real estate, \$246,632; personal estate, \$195,720; aggregate property, \$442,352.

Property returned by colored taxpayers: Acres of land, 435; value, \$1,202; city property, \$1,110; amount of money, \$29; household furni-

* There is an error in either the statement of the Census Bureau, or in the report to the Comptroller-General, as to the acreage of Glascock county.



POTATO FIELD IN MARCH IN THE SUBURBS OF BRUNSWICK, GA.



PECAN GROVE NEAR BRUNSWICK, GA.

ture, \$3,055; watches, etc., \$66; farm and other animals, \$3,221; plantation and mechanical tools, \$712; Aggregate property, \$9,464.

In the public school system there are 13 schools for whites, with an enrollment of 741 pupils, and 6 for colored, with an enrollment of 248.

The tax returns for 1901 show an increase of \$21,193 since the returns of 1900.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: no report.

Population of Glascock county by sex and color, according to the census of 1900: white males, 1,458; white females, 1,543; total white, 3,001; colored males, 713; colored females, 802; total colored, 1,515.

GLYNN COUNTY.

Glynn County was first laid out in 1765 into two parishes, St. Patrick's and St. David's. Extensive settlements had been made here many years before. In 1777, during the war for independence, the above named parishes were formed into the county of Glynn, so named in honor of John Glynn, Esq., distinguished for his unwavering fidelity to the cause of American liberty. This county is bounded as follows: north by Wayne county and northeast by McIntosh, east by the Atlantic ocean, south by Camden county and west by Wayne.

The principal streams are the Altamaha on the northeastern border, the Little Satilla on the southwest, the Turtle river, on whose east bank stands the city of Brunswick, the St. Simon's river, St. Simon's sound and numerous inlets. There are also many creeks. There is considerable marsh lands. Wherever the marshes have been drained, the lands are very productive.

There is a great variety of soil; stretches of sand, black hummock lands and gray loam mixed with oyster shells.

The acreage of crops will show what things are chiefly cultivated in this county. The number of acres planted in cotton are 10; in corn, 2,000; in wheat, 5; in oats, 1,000; in rye, 25; in rice, 1,000; in sugar-cane, 1,000; in Irish potatoes, 100; in sweet potatoes, 1,000; in field peas, 1,000; in ground-peas, 300; in garden vegetables of every kind, 500.

The sea-island or long-staple cotton, though not planted much, produces about 1,200 pounds to the acre. The other average yields to the acre are: Corn, 25 bushels; wheat, 5 bushels; oats, 20 to 35 bushels; rice, 47 bushels; Irish potatoes, 80 to 200 bushels; sweet potatoes, from 200 to 400 bushels; field-peas, 20 bushels; ground-peas, 30 bushels; sugar-cane syrup, 300 to 630 gallons.

There is but little hay raised in the county; but Bermuda and crab grass do exceptionally well. As many as 10,000 pounds of the latter have been raised in one season. Eighty bushels to the acre of barley and rye sown together have been raised in one season.

Market gardens or truck farms have a fine local market in the city of

Brunswick. Some of the farmers ship Irish potatoes to northern and eastern markets in May and June. Some buyers from Boston cleared \$150 an acre on Irish potatoes in the spring of 1900. Strawberries are very profitable, as are also blackberries and whortleberries, which grow in wild profusion. Five hundred acres were devoted to melons in 1900, the average net profit on which was \$50 an acre. The melons of Glynn county are famous for size and flavor. The market gardens are seven, with products averaging \$7,000 each.

Fruit-raising is so far in the experimental stage. About 50 acres each have been devoted to peaches, plums and pears and 5 to quinces. The peaches bring a net value of \$50 to the acre, the plums \$25, the pears \$20. On account of experiments made at Sterling, Ga., on the Southern road, much attention will be given in future to fruit-raising.

There are also two florists' establishments, engaged in the cultivation of flowers and flowering plants for the market, whose sales amount to about \$2,000 a year.

In 1890 there were in Glynn county about 258 sheep, with a wool-clip of 222 pounds; 4,890 cattle, 264 being working oxen and 1,034 milch-cows, producing 69,110 gallons of milk; 9,276 poultry of various kinds, producing 19,662 dozens of eggs; and 3,341 hogs.

The production of honey was small, 1,930 pounds. At the same time there were reported 255 horses and 69 mules. But these did not include those in the city of Brunswick. According to a recent estimate there are 300 goats in Glynn county.

Some little attention is being paid to the improvement of the breed of beef cattle. Two Hereford bulls and one Shorthorn have been lately imported into the county.

There are two dairy farms near Brunswick having about 75 cows, and making a net profit of about \$5,000. Most of the cows on these farms are Jerseys.

Game is plentiful, especially ducks in the winter. Fish are abundant the year round; oysters and clams in the winter. Probably \$5,000 worth of fish are shipped in a year. It could easily be \$100,000 worth.

Oyster beds are cultivated to some extent. Choice Brunswicks bring the highest prices known in the markets. Crabs and shrimp abound in the proper season. There are about 500 people in Glynn county who make a livelihood by fishing. One firm is engaged in supplying the interior trade. The market so far is mostly local.

The timbers in the county available for market and manufacturing purposes are about as follows: Cypress, 5,000,000 feet; sweet gum, 10,000,000; beech gum, 5,000,000; white oak, 3,000,000; ash, 3,000,000; post oak, 5,000,000; live oak, 5,000,000; hickory, 1,000,000; pine, 10,000,000. About 40,000,000 feet of lumber are exported from Brunswick, and 20,000,000 are cut out by the county mills. Most of the lumber is carried down the river and sawed at Brunswick. Of 7 saw-mills 3 cut cypress logs and have a capacity of 100,000 feet in a day; and 4 that cut yellow pine have a capacity of 60,000 feet a day. All these mills are operated by steam.

There are two barrel factories, employing 200 hands, with an annual output of 125,000 barrels, valued at \$150,000. These barrels are used for rosin and spirits of turpentine.

Brunswick, the county site, the second seaport in Georgia, with a population numbering 9,081, is beautifully situated on a bluff of white sand, elevated from 8 to 12 feet above high water, and extends up and down the river more than two miles. Its situation is suited for a city of the largest extent. It has water-works, gas and electric lights, all under the control of one company, valued at \$200,000. It has also an ice factory making good profits, two banks with an aggregate capital of \$200,000, three planing and variety mills and the large sawmills already mentioned. The Brunswick and Western division of the Plant System has repair shops here which employ 100 hands. The Southern Railway also employs several hands at its extensive yards.

Among the public buildings of Brunswick are a court-house, valued at \$20,000; a city hall, worth \$35,000; two public school buildings, one valued at \$8,000 and the other at \$5,000. In the public schools of the city are enrolled 810 white pupils and 1,804 colored.

The commerce of the city has grown in value from \$500,000 in 1884 to \$38,000,000 in 1899. The Mallory line of freight and passenger steamers runs from Brunswick to New York, and the Clyde line from Brunswick to Boston. There are steamboat lines to Darien, St. Simon's Island, to Cumberland Island and Fernandina, Florida; also a tri-weekly line to points on the Satilla river. The cotton exports from Brunswick for the past season were 25,000 bales.

Thirty miles of shell roads leading out from Brunswick and 50 miles of salt water rivers and creeks, together with the railroads, make the matter of marketing quite easy. The county convicts are kept busy all the time repairing the roads.

Artesian wells supply pure water to the city and county, and also furnish to truck farmers easy means of irrigation.

The schools of the city and county are of the very best. In the 18 county schools for whites the average attendance is 650, and in the 19 for colored 1,274.

All the Christian denominations have good church edifices and large memberships. The Jews also have a synagogue.

The shipments of lumber from Brunswick for 1900 were as follows:

	Domestic.	Foreign.
Lumber (feet)	143,084,000	25,286,000
Timber (feet)	353,000	11,484,000
Shingles (number)	9,017,100	917,000
Ties (number)	2,131,173	50,444
Staves (number)	500	60,000
Laths (bundles)	75,000	

The area of Glynn county is 468 square miles, or 299,520 acres.

Population of Glynn county in 1900, 14,317, a gain of 897 since 1890; school fund, \$9,797.19.

By the Comptroller-General's report for 1900 there are: acres of improved land, 69,712; of wild land, 120,131; average value of improved land, to the acre, \$6.00; of wild land, \$1.12; city property, \$2,113,944; shares in bank, \$184,400; gas and electric lights, \$62,540; building and loan association, \$85,912; money, etc., \$155,712; merchandise, \$259,815; shipping, \$2,850; cotton manufactories, \$1,050; iron works, \$3,100; mining, \$200; household furniture, \$189,284; farm and other animals, \$79,151; plantation and mechanical tools, \$15,011; watches, jewelry, etc., \$12,567; value of all other property, \$128,667; real estate, \$2,666,521; personal estate, \$1,193,875; aggregate property, \$3,862,396.

Property returned by colored taxpayers: number of acres of land, 14,791; value, \$42,659; city property, \$124,570; money, \$900; merchandise, \$2,030; household furniture, \$15,932; watches, etc., \$190; farm animals, etc., \$17,186; plantation and mechanical tools, \$1,668; value of all other property, \$965; aggregate property, \$206,100.

The tax returns of 1901 show an increase of \$112,859 since the returns of 1900.

On the coast of Glynn county are several islands, the most important of which are St. Simon's, Jekyl, Blythe, Colonel's, Crispine, Little St. Simon's, Long Island, Rainbow, Hammock and Latham.

Frederica, on the west side of St. Simon's Island, was settled in 1739, and was named for Frederick, Prince of Wales, only son of George the Second. It was laid out by General Oglethorpe, with wide streets, crossing each other at right angles, and planted with rows of orange trees. This place, which was the residence of General Oglethorpe and figured much in the early history of Georgia, is now in ruins. On St. Simon's Island on July 7th, 1742, was fought a battle between Oglethorpe's regiment and the Spaniards, in which the latter, though greatly outnumbering the English, were defeated with such great loss that the scene of the conflict is to this day known as the "Bloody Marsh."

In this section of the State a gallant exploit was performed by the Americans. The particulars of this affair are given by Colonel Elbert in a letter to Major-General Howe, who commanded the Americans at Savannah. Colonel Samuel Elbert having learned that a British brigantine, a sloop and a prize brig were near Frederica, embarked at Darien with 300 men and two pieces of artillery on three galleys and another boat, and made so sudden and bold an attack that the British vessels promptly surrendered.

In 1788 the Creek Indians overran the country from the Altamaha to the St. Mary's. Captain John Burnett lived at this time at the head of Turtle river with his family and slaves. All the neighbors had fled from the mainland to the islands. Going out one day with his son John, the captain discovered some Indians lying behind a log. The two charged them, receiving the fire of ten Indians, who then went away. The captain was wounded in several places. One of the wounds was in the ear and finally proved fatal. With the aid of his son and a black boy he succeeded in getting to a house. About two weeks afterwards

100 Indians in the dead of night killed a negro sentinel at the gate, and approaching the house attempted to fire it and to break down the door. For four hours the inmates kept the Indians back. The two daughters of Captain Burnett loaded the muskets below and handed them to their brothers above. About daylight 30 men from St. Simon's Island came to their rescue and the savages fled. One negro in the house had been killed and all the negroes outside had been carried away by the Indians. Moses Burnett had received three wounds, none of which proved fatal.

Population of Glynn county by race and color, according to the census of 1900: white males, 2,760; white females, 2,440; total white, 5,200; colored males, 4,547; colored females, 4,570; total colored, 9,117.

Population of the city of Brunswick by sex and color, according to the census of 1900: white males, 2,029; white females, 1,855; total white, 3,884; colored males, 2,466; colored females, 2,731; total colored, 5,197.

Total population of the city of Brunswick, 9,081.

Domestic animals in Glynn county in barns and inclosures, not on farms or ranges, June 1, 1900: 77 calves, 17 steers, 6 bulls, 206 dairy cows, 348 horses, 46 mules, 81 swine.

GORDON COUNTY.

Gordon County was laid out from Floyd and Cass (now Bartow) in 1850, and was named in honor of William Washington Gordon, son of Lieutenant Ambrose Gordon of Maryland, who served in the war for independence under Colonel Wm. Washington, and upon the return of peace settled in Augusta, where his son William was born in 1796. Mr. Gordon was one of the main promoters of railroad enterprise in Georgia, and was president of the Central Railroad at the time of his death in Savannah in 1842.

Gordon county is bounded by the following counties: Murray and Whitfield on the north, Gilmer and Pickens on the east, Bartow and Floyd on the south, and Floyd and Chattooga on the west.

It is watered by the Oostanaula, Coosawattee and the Connesauga rivers, and by Oothcaloga, Sillacoa and Pine Log creeks.

The soil is similar to that of Floyd and Bartow. The average yield to the acre, according to soil and cultivation, is: Seed cotton, 800 to 1,000 pounds; corn, 15 to 50 bushels; oats, 20 to 50 bushels; wheat, 10 to 25 bushels; Irish potatoes, 200 bushels; sweet potatoes, 150 bushels; field-peas, 15 bushels; crab-grass hay, 4,000 pounds; clover hay, 5,000 pounds; fodder, 400 pounds; sorghum syrup, 75 to 300 gallons. A diversified system of farming prevails.

By the census of 1890 there were in this county 3,581 sheep, with a wool-clip of 6,807 pounds; 6,495 cattle, 421 working oxen, 2,416 milch-cows, with a production of 752,158 gallons of milk, 212,000 pounds of butter and 915 pounds of cheese; 114,449 of all kinds of poultry, producing 187,725 dozens of eggs. This county also produced 13,175 pounds

of honey. There is one regular dairy farm producing milk and butter for market. There were 1,535 horses, 1,295 mules, 11 donkeys and 11,578 hogs.

The minerals of Gordon county are iron and limestone, but no mines or quarries of these materials.

The bauxite deposits extend into this county and the limestone deposits are unusually high in carbonate of lime. There are black and variegated marbles near Calhoun, but none are being mined.

The timber growth is mostly hardwood, with some pine. Thirty-three per cent. of the original forest growth is still standing. Several small sawmills find steady employment.

The county site is Calhoun, a pretty and thriving town on the Western and Atlantic Railway. It has one bank, with a capital of \$25,000; a court-house valued at \$25,000; good churches and schools, and about 20 commercial houses and 2 life insurance agencies, which all do a prosperous business. Corn, the small grain and peaches do exceptionally well around Calhoun. Resaca, five miles north of Calhoun, and Lay's Ferry were the scene of fierce combats during the Dalton-Atlanta campaign in 1864. At Calhoun and Resaca are large flour mills, and at Calhoun is a successful brick-yard.

Plumville, Sugar Valley and other thriving villages are on the line of the Southern Railway.

This county is steadily growing in population and wealth.

The cotton receipts are from 5,000 to 6,000 bales for the county.

Most of the products of the county are marketed at Calhoun.

According to the United States census of 1900 during the season of 1899-1900 there were ginned 6,609 bales of upland cotton.

The area of Gordon county is 387 square miles, or 247,680 acres.

Population in 1900, 14,119, an increase of 1,361 since 1890; school fund, \$10,148.40.

By the Comptroller-General's report for 1900 there are: acres of improved land, 217,952; of wild land, 20,059; average value per acre of improved land, \$5.42; of wild land, \$0.28; city property, \$191,276; shares in bank, \$10,000; money, etc., \$193,231; merchandise, \$56,244; cotton manufactories, \$14,100; household furniture, \$96,105; farm and other animals, \$212,941; mining, \$100; plantation and mechanical tools, \$61,659; watches, jewelry, etc., \$6,108; value of all other property, \$34,702; real estate, \$1,378,243; personal estate, \$726,606; aggregate property, \$2,104,849.

Property returned by colored taxpayers: number of acres of land, 2,511; value, \$8,440; city property, \$4,108; household furniture, \$3,157; money, etc., \$139; farm animals, \$5,429; merchandise, \$50; plantation and mechanical tools, \$889; watches, jewelry, etc., \$93; value of all other property, \$260; aggregate property, \$23,121.

The tax returns for 1901 show a gain of \$6,270 in the value of all property over the returns of 1900.

At New Echota, in the first part of the 19th century, lived several distinguished Cherokee chiefs, Elijah Hix, Bondenot and Alexander Mc-

Coy. In 1832 it had 300 inhabitants. Here what was known as the Schermerhorn treaty was negotiated.

Oostanaula was a large Indian town in 1791, and its inhabitants were very hostile to the Americans.

The average attendance on the public schools of Gordon county is 1,650 in the 53 schools for whites and 123 in the 6 schools for colored.

Methodists, Baptists and Presbyterians have churches and other Christian sects are represented.

By the census of 1900 Calhoun, the largest town, had a population of 851, and in the whole Calhoun district there were 2,484 inhabitants.

Population of Gordon county by sex and color, according to the census of 1900: white males, 6,189; white females, 6,299; total white, 12,488; colored males, 850; colored females, 781; total colored, 1,631.

Domestic animals in Gordon county in barns and inclosures, not on farms or ranges, June 1, 1900: 72 calves, 33 steers, 7 bulls, 137 dairy cows, 86 horses, 15 mules, 1 donkey, 24 sheep, 314 swine.

GREENE COUNTY.

Greene County was laid out from Washington county in 1786, and was named in honor of General Nathaniel Greene, Rhode Island's gallant son, who, as commander of the Department of the South, was under the blessing of heaven the greatest factor in the deliverance of the Carolinas and Georgia from British rule, and who after the achievement of independence lived and died in Georgia. A part of this county was set off to Hancock in 1793, a part to Oglethorpe in 1794, a part to Clarke in 1802 and a part to Taliaferro in 1825. Greene county is bounded by the following counties: Oconee and Oglethorpe on the north, Taliaferro on the east, Taliaferro and Hancock on the southeast, Putnam on the southwest and Putnam and Morgan on the west.

The Apalachee and Oconee rivers are in the western part of the county, the former flowing into the latter on the western border. The Ogeechee river rises in this county not far from Greensboro. Other streams are Beaver Dam, Richland and Fishing creeks.

Of 243,800 acres in the county 82,000 are under cultivation. The uplands embrace 195,000 acres; the bottom lands, 48,800; the timber lands, 120,000; the uncultivated lands, 161,800. The average value per acre of the upland and timber lands is \$7.00, of the bottom lands, \$4.00, and of the uncultivated lands, \$2.50.

The soils are both gray and red clay. The 40,000 acres planted in cotton yield on an average 500 pounds of seed cotton to the acre; the 20,000 in corn yield 10 bushels to the acre; the 8,000 in wheat, 8 bushels to the acre; the 4,000 in oats, 20 bushels; the 500 in barley, 25 bushels; the 500 in rye, 8 bushels; the 500 in sorghum, 30 gallons to the acre; the 500 in Irish potatoes, 50 bushels; the 1,000 in sweet potatoes, 40 bushels to the acre; the 3,000 in field-peas, 18 bushels to the acre; the 1,000 acres in ground-peas give 15 bushels to the acre.

The soils are well adapted to Bermuda, clover, pea-vines, German millet and other grass and forage plants. Enough hay is made for home consumption and some is marketed. The product of the county is about 500 tons or 1,000,000 pounds. Under careful culture there have been in Greene county yields of 10,000 pounds of clover hay to the acre, 13,953 pounds of Bermuda-grass hay and 27,130 pounds of corn forage.

There are 12 dairy farms with 325 milch-cows. The Jersey is the favorite. Nearly all other farms have milch-cows, many of them Jerseys, and make butter for domestic use. The total number of cows in Greene county in 1890 was, 2,322, producing 667,785 gallons of milk and 195,220 pounds of butter.

A large quantity of beef cattle is raised in this county, and the shipment amounts to about 50 per cent. Attention is being paid to the improvement of the breed, and within the last five years 5 pure-bred Hereford bulls have been imported into the county. The total number of cattle of all kinds in the county in 1890 were 5,549, of which there were 463 working oxen. There were at that time 881 sheep, with a wool-clip of nearly 2,581 pounds; 1,273 horses, 1,877 mules, 3 donkeys and 9,434 hogs. The goats in the county are estimated at 400. All the various kinds of poultry aggregated 77,113 and their eggs amounted to 155,632 dozen. The county also produced 11,743 pounds of honey.

There is enough of fish and game in the county for sport, but not enough for profit.

There are about 50 market gardens raising several varieties of vegetables for home consumption and for the Atlanta market. Many varieties of fruits, berries, grapes and melons are raised, but only for home consumption or the local markets in the towns of the county.

Pine and the various hardwoods are found in the forests. Very little lumber is shipped from the county. There are 12 sawmills, operated by steam. There is a planing-mill at Union Point, a wagon factory at White Plains, and a box factory at Siloam. Other manufactories are a cotton-mill at Greenvboro, two knitting-mills, one at Union Point and one at Penfield, an electric light plant at Union Point, and 12 flour and grist-mills scattered through the county. There are fine water-powers, especially on the Oconee river. Some of the water-powers are Riley Shoals, Lawrence Shoals, Park Mill Shoals and Scull Shoals. Many thousand horse-powers are undeveloped. There is a copper and iron mine at Union Point, but it is not worked.

Greenvboro, the county site, is located on the Georgia Railroad, between Richland and Beaver Dam creeks. It has 2 banks with an aggregate capital of \$100,000, and a court-house valued at \$20,000. Its population is 1,511, and that of the whole Greenvboro district is 2,402.

Other towns and villages in the county are Woodville, Union Point, Siloam, White Plains, Greshamville, Liberty, Veazey, Parsons and Daniel Springs.

The Baptists, Methodists, Prsebyterians and Episcopalians have churches in the county, in good condition and full membership.

The school privileges are excellent, both in town and country. In

the 29 schools for whites there is an average attendance of 665 pupils, and in the 40 for colored there is a like attendance of 1,276.

The roads of the county are in fine condition and are worked by convicts. There are five hundred miles of public roads and 33 miles of railroad on which are 8 stations. Two branches of the Georgia Railroad traverse the county, one from north to south, the other (the main line) from east to west.

The products of the county are marketed in Augusta, Atlanta and Athens, Georgia.

About 12,000 bales of cotton are received from the entire county, and about 3,500 are shipped from Greensboro. By the United States census of 1900, during the season of 1899-1900, there were ginned 11,583 bales (upland). The mills of the county use 1,800 bales.

The area of Greene county is 400 square miles, or 256,000 acres. Population in 1900, 16,542; school fund, \$12,565.62.

By the Comptroller-General's report for 1900 there are: acres of improved land, 240,599; of wild land, none reported; average value per acre of improved land, \$3.34; city property, \$246,533; money, etc., \$151,211; building and loan, \$8,000; merchandise, \$72,453; stocks and bonds, \$17,200; manufactories, \$35,000; iron works, \$2,000; household furniture, \$79,583; farm and other animals, \$127,690; plantation and mechanical tools, \$28,087; watches, jewelry, etc., \$4,788; value of all other property, \$36,748; real estate, \$1,052,362; personal estate, \$562,486. Aggregate, \$1,614,848.

Property returned by colored taxpayers: number of acres of land, 7,057; value, \$22,698; city property, \$12,840; money, etc., \$100; household furniture, \$14,461; farm and other animals, \$23,509; watches, etc., \$57.00; plantation and mechanical tools, \$3,748; value of all other property, \$336.00. Aggregate value of property, \$77,749.

The tax returns for 1901 show an increase in the value of all property over the returns of 1900, amounting to \$82,877.

The total population of the county, 16,542, shows a loss of 509 since 1890. This loss is the result of a considerable emigration of negroes from the county.

Before the Indians were removed across the Mississippi river, they used to commit many depredations in this county. At one time a party of them burned the town of Greensboro.

On the 31st of May, 1787, a party of the upper Creeks came to the frontiers of Greene county, killed and scalped two men and carried off a negro and fourteen horses. The militia pursuing them killed twelve. The Indians of the lower towns claimed that these were their men and demanded that an equal number of white men should be delivered up to them. Governor Matthews replied: "We will deliver up none of our people, and, if the Indians spill a drop of blood, we will lay their towns in ashes and sprinkle their land with blood."

In the month of April, 1793, the Indians perpetrated many outrages, killing men, women and children. On one occasion a party of thirteen attacked the home of Mr. Fielder, a celebrated scout, during his absence.

Mrs. Fielder and a negro woman attempted to save the horses. The negro woman being wounded in the thigh, her mistress dragged her into the house, in which were four or five guns, which the two women handled with such effect that the Indians were driven off.

Population of Greene county by sex and color, according to the census of 1900: white males, 2,623; white females, 2,702; total white, 5,325; colored males, 5,373; colored females, 5,844; total colored, 11,217.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 77 calves, 12 steers, 3 bulls, 188 dairy cows, 107 horses, 1 donkey, 307 swine, 21 goats.

GWINNETT COUNTY.

Gwinnett County was laid out by the lottery act of 1818. A part was taken from Jackson in 1818 and a part set off to DeKalb in 1822. It was named after the Hon. Button Gwinnett, one of the signers of the Declaration of Independence from the State of Georgia.

The counties bounding it are: Hall and Jackson on the north and northeast, Walton and Rockdale on the southeast, DeKalb on the southwest, DeKalb, Milton and Forsyth on the west and northwest.

Along its whole northwestern boundary runs the Chattahoochee river. The Ulcofauhachee and Yellow rivers, both branches of the Ocmulgee, rise in this county, as does also the Apalachee, a branch of the Oconee.

The northern part of the county is hilly. A belt of red land of superior quality enters the county at the east and runs south. The lands along the rivers and creeks are productive. The uplands are mostly of a gray soil.

The average production to the acre, under fair methods of cultivation is: of corn, 15 bushels; oats, 30; wheat, 10; rye, 5; barley, 10; Irish potatoes, 50; sweet potatoes, 75; field-peas, 10; ground-peas, 20; seed cotton, 750 pounds; crab-grass hay, 2,000 pounds; clover, 2,000 pounds; corn fodder, 250 pounds; sorghum syrup, 75 to 100 gallons. With the best methods these yields are doubled on some of the best lands.

By the census of 1890 there were in Gwinnett 2,992 sheep, with a wool-clip of 4,312 pounds; 9,168 cattle, 679 working oxen, 3,528 milch-cows producing 1,070,368 gallons of milk, from which were made 346,562 pounds of butter and 115 pounds of cheese. There were 153,216 of all kinds of poultry, producing 203,623 dozens of eggs. There were also 1,240 horses, 2,094 mules, 6 donkeys and 12,130 swine. The county produces also 32,763 pounds of honey.

The native grasses give a fine range for sheep and cattle.

There are fine water-powers along the Chattahoochee river.

The timbers are the various kinds of oak, hickory, maple, poplar, gum and some pine.

Lawrenceville, the county site, is situated on the Seaboard Air Line Railroad. It has a branch road of this same system connecting it with Loganville, in Walton county, and another, the Lawrenceville road, con-

necting it with Suwannee, on the Southern Railway. Lawrenceville has a bank, and during the past year a cotton-mill with a capital stock of \$60,000 has been put in operation. The Lawrenceville district has a population of 2,535 of whom 853 live in the town.

Buford, on the Southern Railway, is a busy town, having two banks with an aggregate capital of \$50,000; 4 tanneries, 3 large harness factories and 1 small one employing 575 hands and turning out more than 200 dozen horse collars a day. The Sugar Hill district has a population of 3,226, of whom 1,352 live in the town of Buford, and 211 in the town of West Buford. This is a prosperous and growing county with a fine climate and a progressive people.

Granite of excellent quality is abundant. Iron, quartz and buhrstone are found in considerable quantities. Some gold has been found in the Chattahoochee river and in some other places.

The schools are in good condition, and churches are found in every neighborhood. In the 84 schools for whites, the average attendance is 3,123, and in the 20 for colored there is an average attendance of 468.

According to the United States census of 1900 the number of bales of cotton ginned in Gwinnett county for the season of 1899-1900, was 17,667 bales (upland).

The area of Gwinnett county is 510 square miles, or 326,400 acres. Population in 1900, 25,585, an increase of 5,686 since 1890; school fund, \$16,168.94.

By the Comptroller-General's report for 1900 there are: acres of improved land, 286,490; average value per acre of improved land, \$5.92; city property, \$374,793; shares in bank, \$32,000; money, etc. \$385,378; merchandise, \$125,299; cotton factories, \$35,630; iron works, \$300; household furniture, \$155,208; farm and other animals, \$268,224; plantation and mechanical tools, \$74,709; watches, jewelry, etc., \$8,311; value of all other property, \$51,563; real estate, \$2,073,139; personal estate, \$1,142,086. Aggregate property, \$3,215,225.

Property returned by colored taxpayers: number of acres of land, 2,615; value, \$4,998; city property, \$4,375; money, etc., \$787; household furniture, \$5,122; farm and other animals, \$10,562; watches, etc., \$87; plantation and mechanical tools, \$1,857; value of all other property, \$131.00. Aggregate property, \$37,919.

The tax returns of 1901 show a gain of \$166,011 in the value of all property, as compared with the returns of 1900.

In the court-house square at Lawrenceville stands a monument, on one side of which is the following inscription: "This monument is erected by their friends to the memory of Captain James C. Winn and Sergeant Anthony Bates, Texan volunteers of this village, who were taken in honorable combat at Goliad, Texas, and shot by order of the Mexican commander, March 27, 1830." On the other side of the monument is another inscription which reads thus: "To the memory of Ensign Isaac Lacy, Sergeant James C. Martin, and privates Wm. M. Sims, John A. V. Tate, Robert T. Holland, James H. Holland, brothers; Henry W. Peden, James M. Allen, members of the Gwinnett company of Mounted Vol-

unteers, under the command of Captain H. Garmany, who were slain in battle with a party of Creek Indians at Shepherd's, in Stewart county, June 9, 1836. Their remains rest beneath this monument."

Population of Gwinnett county by sex and color, according to the census of 1900: white males, 10,735; white females, 10,707; total white, 21,442; colored males, 2,094; colored females, 2,049; total colored, 4,143.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 132 calves, 21 steers, 18 bulls, 285 dairy cows, 151 horses, 19 mules, 525 swine, 6 goats.

HABERSHAM COUNTY.

Habersham County was laid out by the lottery act of 1818, and was named for Joseph Habersham of Savannah, a distinguished patriot of the Revolution, who was Postmaster-General under Washington and Adams. This county is bounded on the north by Rabun, on the east (or rather northeast) by the State of South Carolina, from which it is separated by the Tugaloo river, on the southeast by Franklin county, on the south by Banks, on the southwest by Hall, and on the west by White. The Chattahoochee river is on the western boundary and the Soque is one of its tributaries. Other streams are Hazel creek and Mud creek.

The surface of the county is broken. The lands along the Tugaloo river are productive of corn, wheat, rye and oats. Some cotton is raised in the southern part of the county.

Of 224,857 acres in the county, 74,779 are under cultivation, 114,286 are uplands, 61,408 lowland, 37,650 bottom land, 137,567 timberland and the number of acres uncultivated is 150,078.

The soils are varied and are adapted: the uplands, to fruit and the vine; the lowlands to grain, root crops, peas and grasses; the bottom lands to corn, hay and melons. Vegetables and legumens do well on all of these.

Two thousand one hundred and seventy acres in cotton produce 500 pounds of seed cotton to the acre; 44,200 in corn, 18 bushels to the acre; 11,214 in wheat, 15; 6,455 in oats, 12 bushels to the acre; 1,172 in rye, 15 bushels; 4,150 acres in sorghum give 100 gallons to the acre; 1,170 acres in Irish potatoes yield 200 bushels to the acre; 1,730 in sweet potatoes give 80 bushels to the acre; 1,200 in field-peas, 40 bushels to the acre. Some farmers have raised 30 bushels of corn to the acre and 40 of oats. Garden vegetables do well, especially cabbage and Irish potatoes. Berries, fruits of all kinds, and melons grow to perfection. Apples and peaches bring good profits.

There is no soil or climate better suited to the growth of forage crops. Clover, alfalfa, vetches, and all the hay grasses do well. They are little raised, however, because the native grasses supply abundant pasture without them. The cultivation of hay would be profitable in Habersham county. Without any special effort 2,000 pounds of clover to the acre are produced.

While there are no dairy farms by the census of 1890, there were 5,188 cattle and 1,701 milch-cows (many of them Jerseys), producing 454,140 gallons of milk and 130,648 pounds of butter.

The rearing of beef cattle as an industry is on the increase, and the breed is improving rapidly. Two Polled Angus and 8 shorthorned bulls have lately been imported into the county.

Of all kinds of poultry there were in 1890 43,037, producing 89,876 dozens of eggs. This county produced also 14,562 pounds of honey.

There were 5,343 sheep, with a wool-clip of 8,823 pounds. There were also 7,839 swine, 623 horses, 436 mules and 14 donkeys. During the past five years stock of all kinds has improved 30 per cent.

There are 51 vineyards covering about 970 acres. The value of the grapes sold is \$9,780, and the revenue derived from the sale of their wine is \$71,720.

The timber of the county is white oak, post oak, maple, hickory, beech, walnut, cedar and pine. All these are available for manufacturing purposes. There are six sawmills in the county operated by steam and valued at \$8,000.

Near Cornelia are the cotton-mills of the Porter Manufacturing Company, with 6,000 spindles and a capital of \$125,000, and at Toccoa are the Toccoa Mills, with 5,000 spindles and a capital of \$50,000. There is a woollen-mill in connection with the Porter Manufacturing Company. There are also 8 flour and grist-mills in Habersham county. There is a sash and blind factory at Cornelia and one at Toccoa. There are also a tannery and a wagon factory at Cornelia. All the grist-mills and the mills of the Porter Manufacturing Company at Cornelia use water-power. The rest use steam.

All the manufactories of the county, taken together, employ 728 hands, and pay out in salaries \$215,300. In addition to the manufactories already mentioned, there are 5 registered brandy distilleries.

Clarksville, the county site, is situated on the line of the Tallulah Falls Railway, near the Soque river, on a high ridge. Here the eye of the tourist is delighted by the picturesque grandeur of the surrounding country. The population of the district is 1,382, of whom 491 live in the town.

Cornelia, on the Southern Railway, is a thriving town with several manufacturing establishments and a bank with a capital of \$25,000. In the neighborhood of Cornelia some of the finest peaches of Georgia are raised and its vineyards produce the most luscious grapes, from which wines of the finest quality are made. The Cornelia district contains 1,058 inhabitants, of whom 467 live in the town.

Toccoa, already mentioned for its manufactories is a thriving town of 2,176 inhabitants on the Southern Railway, at the junction of the Elberton branch with the main trunk line. Toccoa district contains 3,419 inhabitants. Within three miles of it are the lovely falls of Toccoa, already described in a previous chapter.

Demorest, on the Tallulah Falls Railway, is a pretty town with a good trade and commanding from all sides a lovely view. The Demorest dis-

trict, which is coextensive with the town of that name, had a population of 560 in 1900.

Tallulah Falls, just across the boundary of Habersham, in Rabun county, and known far and wide for their scenery in which grandeur and beauty are so charmingly blended, were long claimed by Habersham, but a decision of the Supreme Court of Georgia adjudged them to Rabun.

Other towns are Mount Airy and Ayersville on the Southern, and Turnerville, Anandale and Azalea on the Tallulah Falls Railway.

The products of the county are marketed at Toccoa, Cornelia, Mount Airy, Turnerville, Clarkesville and Demorest, local markets, and at the city of Atlanta, with which all this section is connected by the Southern Railway.

The total cotton receipts and shipments from the entire county are 8,400 bales. The mills of the county use 3,200 bales. The cotton ginned in the county for the season of 1899-1900, according to the United States census for 1900, was 1,435 bales (upland).

The Methodists, Baptists, Presbyterians and Episcopalians are all represented by the churches of this county.

There are good schools in the towns, villages and throughout the county. The average attendance in the 47 schools for whites is 1,169, and in the 7 for negroes, 154. In the schools of Toccoa are enrolled 296 whites and 130 colored.

There are several mountains in this county, of which Currahee is the most noted. It rises in a conical form until it reaches an elevation of nine hundred feet. On the east it descends to the usual level of the land, but on the west, after descending many hundred feet, it blends with a ridge that joins it to the chain of the Alleghanies.

Iron ore of superior quality is found in Habersham county. Granite of the best quality and apparently inexhaustible is all over the county.

A mine of asbestos is being profitably worked. The capital invested is \$8,000, and the annual output is \$22,000.

Gold, copper, manganese, ochre, marble, slate, graphite, mica, talc and sandstone are found. Intelligent citizens claim that the county has unlimited mineral resources that only need development to show some of the richest mines in the Appalachian region.

The area of Habersham county is 372 square miles, or 238,080 acres. Population in 1900, 13,604, an increase of 2,031 since 1890; school fund, \$9,087.75.

By the Comptroller-General's report for 1900 there are: acres of improved land, 213,680; of wild land, 12,085; average value per acre of improved land, \$2.51; of wild land, \$0.47; city property, \$273,719; shares in bank, \$50,000; money, etc., \$125,783; merchandise, \$76,594; building and loan associations, \$7,445; stocks and bonds, \$9,800; cotton manufactories, \$131,781; iron works, \$800; household furniture, \$85,290; farm and other animals, \$107,645; plantation and mechanical tools, \$24,539; watches, jewelry, etc., \$6,333; value of all other prop-

erty, \$15,054; real estate, \$917,366; personal estate, \$671,975. Aggregate property, \$1,589,341.

Property returned by colored taxpayers: number of acres of land, 2,445; value, \$5,799; city property, \$15,318; money, etc., \$310; merchandise, \$95; household furniture, \$3,209; farm and other animals, \$3,347; plantation and mechanical tools, \$561; watches, etc., \$84.00; value of all other property, \$273.00. Aggregate property, \$32,354.

The tax returns of 1901 show an increase in the value of all property over the returns of 1900, amounting to \$68,722.

Population of Habersham county by sex and color, according to the census of 1900: white males, 5,870; white females, 5,942; total white, 11,812; colored males, 869; colored females, 923; total colored, 1,792.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 91 calves, 46 steers, 2 bulls, 281 dairy cows, 203 horses, 40 mules, 1 donkey, 4 sheep, 498 swine, 3 goats.

HALL COUNTY.

Hall County was laid out by the lottery act of 1818, and was named for Lyman Hall, a signer of the Declaration of Independence in behalf of Georgia and governor of the State from January 9, 1783 to January 9, 1784. It is bounded by the following counties: White and Lumpkin on the north, Habersham on the northeast, Banks on the east, Jackson on the southeast, Gwinnett on the south and southwest, Forsyth and Dawson on the west and Lumpkin on the northwest. The principal rivers are the Chattahoochee, Oconee, Chestatee, Walnut and Little. There are also numerous creeks. On these streams the lands are very productive. Almost every variety of soil is found in this county.

According to the soil and method of cultivation the lands of Hall county will produce to the acre: from 750 to 1,500 pounds of seed cotton; from 15 to 20 bushels of corn; from 10 to 20 bushels of wheat; from 20 to 40 bushels of oats; from 10 to 15 bushels of rye; 100 bushels of Irish potatoes; 200 bushels of sweet potatoes; 15 bushels of field-peas and 25 of ground-peas; 250 gallons of sorghum syrup. All grasses and forage crops do well and are raised to a considerable extent. The average hay production is: crab-grass, Bermuda-grass and clover, two tons, or 4,000 pounds each to the acre.

The people are very much interested in getting good milch-cows and have a preference for the Jersey. Nearly every family in the country and many in the towns and villages have at least one cow. Some attention also is paid to the rearing of beef cattle, and there have been a few importations of full bred bulls.

In 1890 there were in Hall county 6,635 cattle, of which 2,429 were milch-cows, producing 734,188 gallons of milk, 247,355 pounds of butter, and 75 pounds of cheese. There were also 112,635 of all varieties of poultry, producing 122,102 dozens of eggs. The county also produced 29,937 pounds of honey. Other animals were 823 horses, 1,437 mules,

8 donkeys, 8,724 swine and 2,479 sheep, with a wool-clip of 3,913 pounds.

There is some trucking in a small way to supply the home market. Berries of all kinds and grapes are raised extensively. There are several small vineyards of from 5 to 20 acres. Fine melons, peaches and apples are raised. All fruits of every kind grow to perfection and the home market is kept well supplied. The apples only are marketed to any considerable extent outside of the county.

There are 2 florists engaged in raising flowers and flowering plants for sale.

There is a great variety of minerals in the county. Some of the gold mines are operated profitably. There are also iron, lead and silver in small quantities. Large quantities of brick and lime are made. There is also a large supply of building stone. The county has several valuable water-powers amounting to about 6,000 horse-powers. Since 1892 there has been some additional utilization of water-powers by several new flouring and grist-mills. There are in all 35 of these mills, with an aggregate value of \$35,000.

About half the land of the county is timber, mostly white oak, post oak, poplar, hickory, pine, maple, ash, walnut, mountain oak, and locust. These fine timbers are utilized by 12 or more sawmills.

Gainesville, the county site, on the Southern Railway 53 miles from Atlanta, is a growing city of 4,382 inhabitants. It has a court-house valued at \$75,000; three banks, whose capital aggregates nearly \$200,000, and an electric light plant and water-works owned by the city. There are located here many manufacturing establishments, viz.: a large shoe factory, 4 tanneries, 4 planing-mills, 3 sash, blind and furniture establishments, 3 wagon and carriage and buggy factories, 1 ice factory, 1 furniture and chair factory, 1 steam laundry, 1 iron foundry and machine shop, 5 brick works, limeworks, 1 paper box factory, 1 pottery, 1 cotton seed oil-mill, the railroad shops of the Gainesville, Jefferson and Southern and two cotton-mills. One of these now nearing completion represents a capital of \$1,000,000. In all these manufactories between two and three thousand hands are employed. The enterprising citizens of this progressive town are projecting canneries, wool factories, electric power-plant for street railways and a manufactory of cotton towels. Of course life and fire insurance companies have their active agents in this busy city.

In the Gainesville district, which includes the city, there are 5,820 inhabitants.

The Southern Railway crosses the county from southwest to northeast, and a branch of it running along its eastern boundary connects Belton, on the main line, with the city of Athens. The Gainesville, Jefferson and Southern connects Gainesville with Monroe and Social Circle in Walton county, and, by another branch, with Jefferson, the county site of Jackson county. The roads of Hall county are not macadamized, though the streets of Gainesville are.

The county receipts of cotton are about 15,000 bales, about 10,000 of



BUFF PLYMOUTH ROCK COCK.

which are handled at Gainesville. According to the United States census of 1900 there were ginned 9,586 bales of upland cotton during the season of 1899-1900.

The products of the county are marketed chiefly in Gainesville, but Flowery Branch and Belton on the Southern Railway come in for a share.

When the new cotton mill is completed, the mills will use more than 30,000 bales a year.

The Brenau College and Conservatory of Music is situated at Gainesville. It has a large attendance of pupils. The public schools of the city and county are in a good condition. The Georgia Military Institute for young men was completed in 1900.

The churches of the city and county are at convenient distances, and are in easy reach of all the citizens. They represent Methodists, Baptists, Presbyterians and Episcopalians.

The average attendance in the public schools of the county is 1,995 in the 68 schools for whites, and 285 in the 15 for colored. In the schools of Gainesville there are enrolled 615 whites and 214 colored pupils.

The area of Hall county is 449 square miles, or 287,360 acres. Population in 1900, 20,752, an increase of 2,705 since 1890; school fund, \$14,132.02.

By the Comptroller-General's report for 1900, there are: acres of improved land, 252,457; of wild land, 1,473; value per acre of improved land, \$4.98; of wild land, \$0.65; city property, \$1,059,850; shares in bank, \$103,000; money, etc., \$433,857; merchandise, \$229,685; stocks and bonds, \$7,000; cotton manufactories, \$81,475; iron works, \$1,200; mining, \$1,450; household furniture, \$181,072; farm and other animals, \$221,538; plantation and mechanical tools, \$52,897; watches, jewelry, etc., \$10,347; value of all other property, \$50,277; real estate, \$2,317,827; personal estate, \$1,512,718. Aggregate property, \$3,830,545.

Property returned by colored taxpayers: number of acres of land, 3,754; value, \$11,430; city property, \$12,625; money, etc., \$175; merchandise, \$20; household furniture, \$6,698; farm and other animals, \$7,527; plantation and mechanical tools, \$1,183; watches, etc., \$115; value of all other property, \$704.00. Aggregate property, \$46,082.

The tax returns for 1901 show an increase in the value of all property of \$176,661 over the returns of 1900.

Population of Hall county by sex and color, according to the census of 1900: white males, 8,655; white females, 8,825; total white, 17,480; colored males, 1,627; colored females, 1,645; total colored, 3,272.

Population of Gainesville City by race and color, according to the census of 1900: white males, 1,525; white females, 1,671; total white, 3,196; colored males, 536; colored females, 650; total colored, 1,186.

Total population of Gainesville, 4,382.

Domestic animals in Hall county in barns and inclosures, not on farms or ranges, June 1, 1900: 108 calves, 21 steers, 1 bull, 329 dairy cows, 270 horses, 89 mules, 2 donkeys, 401 swine, 4 goats.

HANCOCK COUNTY.

Hancock County was laid out in 1793, and received its name in honor of John Hancock of Massachusetts, chairman of the Continental Congress, in which position he performed duties now belonging to the President of the United States. By virtue of his position he was the first man to sign the Declaration of Independence.

The north fork of the Ogeechee river separates the county from Warren, and the Oconee from Putnam. It is bounded by the following counties: Taliaferro on the north, Warren on the northeast, Glascock a few miles on the east, Washington on the southeast, Baldwin on the southwest, Putnam on the west, and Greene on the northwest.

The northern part of Hancock county is very hilly, with a red, aluminous soil. The southern portion is flat pine woods, with silicious soil. The best lands are said to be on Shoulderbone creek and its tributary waters. Other streams in the county are Little Ogeechee river, Buffalo, Keg and Town creeks.

The lands of the county under good cultivation will average per acre: seed cotton, 1,200 pounds; corn, 15 bushels; oats, 40 bushels; wheat, 10 to 20 bushels; rye, 10 bushels; barley, 15 bushels; Irish potatoes, 150 bushels; sweet potatoes, 200 bushels; field-peas, 25 bushels; ground-peas, 60 bushels; crab-grass hay, 4,000 pounds; Bermuda grass hay, 5,000 pounds; clover, 4,000 pounds; corn forage, 3,000 pounds; sorghum syrup, 150 gallons; sugar-cane syrup, 200 gallons.

Some of the best lands in the county, under careful cultivation, have yielded as high as 2,800 pounds of seed cotton to the acre; 65 bushels of corn and 42 bushels of wheat. According to the United States census of 1900, during the season of 1899-1900, there were ginned 14,371 bales of upland cotton in Hancock county.

Garden vegetables of all kinds do well in Hancock county. Melons and berries of the best quality are among the products of fields and gardens. Several farmers of the county have orchards containing from 2,000 to 12,000 peach-trees, from which great quantities are shipped to market, and large quantities used for home consumption.

By the census of 1890 there were in the county, 6,390 cattle, of which there were 606 working oxen and 2,366 milch-cows, producing 482,352 gallons of milk and 134,733 pounds of butter. The 72,985 domestic fowls of all kinds produced 114,404 dozens of eggs, and from the beehives were gathered 13,454 pounds of honey. There were also 1,253 horses, 1,735 mules, 2 donkeys and 12,920 swine. The 502 sheep gave a wool-clip of 1,569 pounds.

The timbers are pine, oak, sweet-gum, maple, hickory and other hardwoods.

Sparta, the county site, with a population of 1,150, is a beautiful town, on that branch of the Georgia Railroad which connects Augusta and Macon. Its court-house is an imposing building valued at \$50,000. A company has been organized to build at Sparta a cotton-mill. At this

town is a creamery which receives 2,200 gallons of milk a day. Sparta is partly in the 102d and 113th militia districts, the former having 3,116 inhabitants and the latter 2,442.

The people of this county have given much attention to education, and are among the most intelligent and cultured in the State. The schools of Sparta have a fine reputation, and at Mount Zion, seven miles from Sparta, is the celebrated academy so many years presided over by Dr. Beeman, and afterwards by Hon. W. J. Northen, subsequently governor of Georgia for two terms. In this county also lived for many years the eloquent divine, Dr. Lovick Pierce, and his gifted son, Bishop George F. Pierce, one of the most eloquent pulpit orators that America ever produced.

At Jewells on the north fork of the Ogeechee, is a cotton-mill with a capital of \$75,000. Other postoffices in the county are Carr's Station, Cawthen, Culverton, Devereux Station, Linton, Mayfield, Powelton and Shoulder.

Some valuable minerals have been found in this county: asbestos, plumbago, kaolin, agate, etc.

There are some remarkable mounds. The principal one is 400 feet north of the center prong of Shoulderbone creek. Its base is 20 feet above the level of the creek. Around it are the remains of an entrenchment, containing about four acres. Near the mound is an inclosure. Human bones to a large amount have been found. Shoulderbone creek is memorable as the place where a treaty was made with the Creek Indians in 1786.

This is a county of churches and strong religious influence. All Christian denominations are represented in membership.

The area of Hancock county is 523 square miles, or 334,720 acres. Population in 1900, 18,277, an increase of 1,128 since 1890; school fund, \$14,157.88.

By the Comptroller-General's report for 1900 there are: acres of improved land, 276,282; average value per acre, \$3.70; city property, \$186,695; money, etc., \$203,879; merchandise, \$88,730; stocks and bonds, \$31,950; cotton factories, \$115; household furniture, \$85,062; farm and other animals, \$159,105; plantation and mechanical tools, \$33,831; watches, jewelry, etc., \$8,607; real estate, \$1,219,291; personal estate, \$686,832; value of all other property, \$48,803. Aggregate property, \$1,906,123.

Property returned by colored taxpayers: number of acres, 19,703; value, \$89,555; city property, \$10,760; money, \$8,075; merchandise, \$1,515; household furniture, \$12,350; farm and other animals, \$37,202; plantation and mechanical tools, \$6,844; watches, etc., \$286; value of all other property, \$6,550. Aggregate property, \$173,803.

The tax returns for 1901 show an increase in the value of all property since the returns of 1900, amounting to \$68,851.

There is an average attendance of 757 in the 29 schools for whites, and 1,191 in the 34 for colored pupils.

Population of Hancock county by sex and color, according to the

census of 1900: white males, 2,291; white females, 2,358; total white, 4,649; colored males, 6,615; colored females, 7,013; total colored, 13,628.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 60 calves, 63 steers, 5 bulls, 125 dairy cows, 101 horses, 6 mules, 1 donkey, 16 sheep, 189 swine, 17 goats.

HARALSON COUNTY.

Haralson County was formed from Polk and Carroll in 1856, and was named for Hon. Hugh A. Haralson of Troup county, who was a member of Congress from 1845 to 1850. It is bounded as follows: Polk county on the north, Paulding and Carroll on the east, Carroll on the south and the State of Alabama on the west. The Tallapoosa river and numerous branches water the county.

Of 180,480 acres in the county, about 75,000 are under cultivation. This does not mean, however, that all the rest are wild lands. The acres of upland are about 125,000, of lowland 50,000, of bottom land 25,000. The bottom lands bring in the market \$20 an acre; the lowlands, \$10; the uplands, \$5. There are 125,000 acres of timber land, more or less cleared. These lands vary in price from \$1 to \$25. Considerable pine of excellent quality is obtained. There are also several varieties of hardwood.

The face of the country is broken. The climate is cool and bracing and pure water is abundant. The bottom lands on the watercourses and the valley lands are rich and produce abundantly. The soil is for the most part red with clay subsoil. The acreage of the various crops is: for cotton and corn, 30,000 each; wheat, oats, rye, sorghum, Irish potatoes and garden vegetables about 1,000 each, for sweet potatoes, 4,000; and for field-peas, 5,000. The average yield to the acre of all crops is: seed cotton, from 600 to 1,100 pounds; corn, 20 to 25 bushels; oats, 30 to 40; wheat, 15 to 25; rye, 20 to 30; Irish potatoes, 100 bushels; sweet potatoes, 100 bushels; field-peas, 15; ground-peas, 70; crab-grass hay, 6,000 pounds; clover, 8,000 pounds; corn fodder, 300 pounds; sorghum syrup, 100 gallons.

The above yields of hay have been made in the county, but of late years very little attention has been paid to it. Too much time and labor have been put upon cotton to the neglect of the other crops. The county can raise its own hay and forage crops and be independent. The native grasses give fine range for sheep and cattle. Though there are no dairy farms, there were by the census of 1890 1,507 milch-cows producing 399,705 gallons of milk, from which were made 147,320 pounds of butter. Some attention is being paid to the improvement of the breeds of cattle, and many shorthorns, among them thoroughbred bulls, have been introduced, and also many Jerseys, which here, as everywhere else in the State, are the favorites for dairy purposes.

According to the census of 1890 the total number of cattle in the

county was about 4,501, of which 660 were working oxen. 57,536 domestic fowls of all kinds gave 103,510 dozens of eggs. This county produced 11,474 pounds of honey. There were 421 horses, 683 mules, 5 donkeys, 8,076 hogs, and 2,656 sheep, with a wool-clip of 4,841 pounds.

Apples, peaches, grapes, berries and a great variety of vegetables, yield abundantly. About 1,000 acres are devoted to melons, with a profit of \$50 to the acre. About 500 acres each are devoted to apples and peaches. There is one canning establishment which puts up 500 cans of peaches and apples a day. The profits by the acre on these fruits in a favorable season amount to \$100.

This is a great county for vineyards, of which there are 500, covering 5,000 acres. Twenty-five per cent. of the grapes is the number marketed, and from nearly all the balance wine is made. The value of the grapes sold is stated as \$50,000, and the revenue from the sale of the wine is estimated at \$100,000. There are two wineries, one of which manufactures unfermented wine.

In addition to the pine the county abounds in oak, gum, maple, poplar and other hardwoods of good quality. There are many small sawmills preparing the lumber for planing mills and shingle machines. The annual output of lumber is about 1,000,000 superficial feet, with an average price of \$8 a thousand feet.

Gold is being mined quite extensively. The Royal Gold mine, at Tallapoosa, has a plant which cost \$200,000. There are other small mines in operation.

There is in the county water-power sufficient for all needed purposes.

Among the manufactories may be mentioned a charcoal pig-iron furnace and a glass factory, and several flour and grist-mills.

The old Chattanooga, Rome and Southern, now a part of the Central of Georgia system, and the Georgia Pacific branch of the Southern system, pass through the county, the first from north to south, the latter from east to west. A short road from Alabama also touches the Southern at Tallapoosa.

Tallapoosa is a thriving town of 2,128 inhabitants, with banking privileges and with a water-works plant valued at \$50,000. Here there is a railroad shop. The entire Tallapoosa district has a population of 3,005.

The county seat is Buchanan, named in honor of James Buchanan of Pennsylvania, president of the United States from 1856 to 1860. It is on the Chattanooga, Rome and Southern Railway near the headwaters of the Tallapoosa river. The court-house is valued at \$25,000.

All the Christian denominations are represented in this county, the Methodists, Baptists and Presbyterians being the most numerous.

The schools are in a flourishing condition. At Tallapoosa is a large school building which cost \$15,000. In the 40 white schools of the county the average attendance is 958 and in the 4 colored schools, 90.

Tallapoosa handles about 2,000 bales of cotton annually. According to the United States census of 1900 there were ginned in this county for the season 1899-1900 5,597 bales of upland cotton.

The area of Haralson county is 282 square miles, or 180,480 acres.

Population in 1900, 11,922, an increase of 606 since 1890; school fund \$7,982.57.

By the Comptroller-General's report for 1900 there are: acres of improved land, 158,540; wild lands, 32,997; average value per acre of improved land, \$4.20; of wild, \$1.15; city property, \$351,628; money, etc., \$131,151; value of merchandise, \$61,783; bonds, \$600; cotton manufactures, \$12,182; iron works, \$1,750; capital in mining, \$212; household furniture, \$84,533; farm and other animals, \$114,846; plantation and mechanical tools, \$30,607; watches, jewelry, etc., \$4,925; value of all other property, \$30,610; real estate, \$1,054,953; personal estate, \$476,500. Aggregate, \$1,531,453.

Property returned by colored taxpayers: number of acres, 1,604; value, \$6,567; city property, \$3,594; money, \$200; merchandise, \$700; household furniture, \$2,577; farm and other animals, \$3,057; plantation and mechanical tools, \$573; watches, etc., \$73; value of all other property, \$158.00. Aggregate property, \$17,499.

The tax returns of 1901 show a decrease of \$13,320 in the value of all property since the returns of 1900, but this apparent decrease arises probably from some slight error in the returns.

Population of Haralson county by sex and color according to the census of 1900: white males, 5,148; white females, 5,132; total white, 10,280; colored males, 808; colored females, 834; total colored, 1,642.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 103 calves, 132 steers, 4 bulls, 210 dairy cows, 130 horses, 64 mules, 3 donkeys, 191 sheep, 363 swine, 34 goats.

HARRIS COUNTY.

Harris County was laid out from Troup and Muscogee in 1827. A part was given back to Muscogee in 1829. It was named in honor of Charles Harris, Esq., an eminent jurist of Savannah. It is bounded on the north by Troup and Meriwether counties, on the east by Talbot, on the south by Muscogee, and on the west by the State of Alabama, from which it is separated by the Chattahoochee river. It is well watered by Mulberry, Sowhachee, Standing Boy, West End, Flat Shoals, Old House and Mountain creeks, all of which empty into the Chattahoochee.

The face of the country is much varied, and so is the soil. The Pine Mountains enter the county near its northeastern corner, and Oak Mountain on the east. Above the Pine Mountains the country is level with a light soil, productive when new, but not lasting. West of the center it is a broken, rich country, heavily timbered. In the valley between Oak and Pine Mountains the soil is gray, while the growth is Spanish oak and hickory. South of the Oak Mountain all the way down Mulberry creek to its union with the Chattahoochee river, the soil is rich. With lands so widely different in point of fertility, the averages of production differ according to location of land as well as manner of culti-

vation. The average production to the acre is: seed cotton, 600 to 900 pounds; corn, 8 to 15 bushels; oats, 15 to 25 bushels; wheat, 8 to 10 bushels; rye, 5 to 8 bushels; barley, 20 to 50 bushels; sugar-cane, 75 to 300 gallons of syrup to the acre; Irish potatoes, 50 bushels; sweet potatoes, 50 to 100 bushels; field-peas, 5 to 10 bushels; ground-peas, 10 to 20 bushels; crab-grass hay, 2,500 pounds; corn fodder, 450 pounds.

There are no dairy farms, but most families have milch-cows. The total number in 1890 was 2,847, with a production of 671,384 gallons of milk and 200,661 pounds of butter.

A good deal of interest is manifested in the rearing of beef cattle, and this has led to improvement of the breed. The total of all kinds of neat cattle in 1890 was 6,962. Much attention is given to poultry, and the domestic fowls of all kinds numbered 87,571, and produced 125,679 dozens of eggs. The product of the bee-hives amounted to 20,803 pounds. Four hundred and forty-five sheep gave a wool-clip of 944 pounds. There were 8,518 swine, 890 horses, 2,213 mules, 7 donkeys, and 313 oxen.

Vegetables of every kind are raised, and fruits of many varieties, but almost exclusively for home use.

Pine and Oak Mountains afford large quantities of lumber which the sawmills are getting ready for building or manufacturing purposes. The sawmills are generally operated by steam.

The Chattahoochee river abounds in water-power for factories of all kinds. Some of the citizens of West Point, just across the line in Troup county, availing themselves of these water-powers, have established cotton-mills on the river just below the town, extending into Harris county. The citizens are anxious for cotton factories and cotton seed oil-mills.

Hamilton, the county site, with a population of 418, on a branch of the Central Railroad, is beautifully located between Pine and Oak Mountains. The court-house cost about \$12,000. The Methodists and Baptists have churches here. There are good schools, one for boys and one for girls. The Hamilton district has 2,278 inhabitants. The whole county is well supplied with schools and churches. Hamilton is $22\frac{1}{2}$ miles from each of the following cities and towns: Columbus, LaGrange, West Point, Talbotton and Greenville. Hamilton has a canning factory, a broom factory and a shoe factory.

ChIPLEY, on the Central Railroad, has a bank with a capital of \$25,000 and two sawmills. On this same road are Summit and Cataula. ELLERSLIE, Waverly Hall and Shiloh are on the Southern.

There are altogether 66 miles of railroad in the county. The cotton receipts and shipments from railroad stations in the county number 12,500 bales, and according to the United States census for 1900, for the season of 1899-1900, there were ginned 22,852 bales of upland cotton in Harris county.

The area of Harris county is 486 square miles, or 311,040 acres. Population in 1900, 18,009, an increase of 1,212 since 1890; school fund \$12,355.43.

By the Comptroller-General's report for 1900 there are: acres of improved land, 268,194; of wild land, \$3,901; average value to the acre

of improved land, \$3.14; of wild land, \$0.74; city property, \$104,168; money, \$120,340; merchandise, \$61,500; stocks and bonds, \$11,280; cotton manufactures, \$92,100; mining, \$800; value of household furniture, \$73,828; farm and other animals, \$160,591; plantation and mechanical tools, \$35,861; watches, jewelry, etc., \$3,718; value of all other property, \$38,828; real estate, \$958,733; personal estate, \$641,985. Aggregate property, \$1,600,718.

Property returned by colored taxpayers: number of acres of land, 12,513; value, \$34,962; city property, \$2,885; merchandise, \$150; household furniture, \$13,769; farm and other animals, \$31,317; plantation and mechanical tools, \$6,960; value of all other property, \$13,261. Aggregate property, \$116,084.

The tax returns for 1901 show an increase of \$90,044 in the value of all property since 1900.

In the 39 schools for whites there is an average attendance of 939, and in the 51 for colored the average attendance is 1,662.

Population of Harris county by sex and color, according the census of 1900: white males, 2,884; white females, 2,939; total white, 5,823; colored males, 5,999; colored females, 6,187; total colored, 12,186.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 21 calves, 11 steers, 19 dairy cows, 21 horses, 31 swine, 1 goat.

HART COUNTY.

Hart County was formed from Franklin, Elbert and Madison counties in 1856. It was named in honor of Mrs. Nancy Hart, a heroine of the Revolution, who lived in Elbert county. A sketch of her appears in the account of Elbert county.

Hart county is bounded as follows: On the north and east by the State of South Carolina, from which it is divided by the Tugaloo and Savannah rivers; on the southeast, south and southwest by Elbert and Madison counties; on the west by Franklin.

Beaverdam, Log, Cedar and Shoal creeks flow through the county.

The soil of the uplands is gray and gravelly; that of the bottom lands gray sandy with red clay subsoil. The chief crops are cotton and corn, but wheat, oats, rye and a little barley, garden vegetables, grasses, etc., are raised. The lands along the Savannah and Tugaloo rivers are very productive.

The climate and water are both conducive to health.

The average production to the acre is: seed cotton, from 500 to 800 pounds; corn, 15 bushels; wheat, 8 to 10; oats, 15 to 30; rye, 10; Irish and sweet potatoes, 100 each; field-peas, 15; crab-grass hay, 2,000 pounds; Bermuda grass, 4,000 pounds; corn fodder with stalk (shredded corn), 4,000 pounds; sorghum syrup, 75 gallons.

Peavine, German and Cattail millets, sorghum and corn forage produce abundantly.

A little irrigation is practiced by turning small streams somewhat out of their natural channels and causing them to go where needed.

From April to October broom sage, Japan clover, Bermuda and meadow grass are used for pasturage; from January to May, rye, barley and oats are used.

A cross between the Jersey and Holstein is preferred here for milk and butter purposes.

In the rearing of beef cattle for the market the people are taking great interest, and from nearly every farm beeves of fine quality are sold. A few pure bred Hereford bulls have been imported into the county. In 1890 there were 5,054 cattle in the county, 1,915 of them milch-cows, producing 555,440, gallons of milk and 199,274 pounds of butter. The sheep numbered 1,511, with a wool-clip of 2,062 pounds. There were 678 working oxen. There were 740 horses, 897 mules, 10 donkeys and 4,696 hogs. The domestic fowls of all kinds numbered 87,372 and produced 75,805 dozens of eggs. The honey product of the county was 19,080 pounds.

There are 12 market gardens, the total value of whose products is about \$6,000, of which 40 per cent. is clear profit. About 25 acres are devoted to melons, which bring a profit of \$75 to the acre.

Fine apples and peaches are raised and have a ready sale. There are also several vineyards, making good profits.

About 30 per cent. of the original forests are still standing. Very little lumber is shipped from the county, but much pine, oak, poplar and hickory are used by the sawmills of the county, which, large and small, number about 25. The annual output of lumber in superficial feet is estimated at 3,750,000 feet, valued at \$7 to \$7.50 a thousand.

The flour and grist-mills number about 25.

At Hartwell is the Witham cotton-mill, which has lately been enlarged to double capacity. This is being operated by steam.

At Shoal creek is another cotton-mill operated by water. One department of this mill manufactures woolen goods.

Other manufactories are shingle and planing-mills, brick kilns and the Hartwell Canning Company's factory and 4 cotton seed oil-mills, all in successful operation.

Hartwell, the county site, is located on the Hartwell railroad, which connects with one of the arms of the Southern Railway at Bowersville. Hartwell's two banks, with an aggregate capital of nearly \$100,000, give to the citizens of the town and county good commercial advantages. The court-house at Hartwell cost \$10,000, the jail \$20,000. Town district, which includes Hartwell, has a population of 3,882, of whom 1,672 live in Hartwell.

The Hartwell Collegiate Institute has an attendance of over 400. The Bowersville and other high schools and lower grades of the public school system are well attended.

The cotton receipts of the county amount to about 10,000 bales, and the shipments, mostly from Hartwell, amount to between 5,000 and 6,000 bales. The mills of the county use about 2,500 bales. According

to the United States census of 1900, in this county in the season of 1899-1900 there were ginned 12,519 bales of upland cotton.

The county roads are in good condition. They are worked by commutation and property tax combined. The best improved machines are used.

The area of Hart county is 257 square miles, or 164,480 acres.

Population in 1900, 14,492, an increase of 3,605 since 1890; school fund, \$9,138.12.

By the Comptroller-General's report for 1900 there are: acres of improved land, 153,116; average value per acre, \$3.88; city property, \$188,001; shares in bank, \$73,746; gas and electric light, \$1,679; building and loan association, \$3,500; money, etc., \$160,265; merchandise, \$55,265; cotton manufactories, \$49,500; household furniture, \$73,746; farm and other animals, \$124,222; plantation and mechanical tools, \$38,319; watches, jewelry, etc., \$2,393; value of all other property, \$15,320; real estate, \$782,343; personal estate, \$603,016; aggregate property, \$1,385,359.

Property returned by colored taxpayers: Number of acres of land 2,532; value, \$9,135; city property, \$2,250; household furniture, \$3,525; farm and other animals, \$9,268; plantation and mechanical tools, \$2,350; value of all other property, \$182; aggregate property, \$26,805.

The tax returns for 1901 show an increase of \$76,174 in the value of all property since 1900.

The average attendance in the 32 white schools is 1,438, and in the 15 for colored, 370.

Population of Hart county by sex and color, according to the census of 1900: white males, 5,207; white females, 5,260; total white, 10,467; colored males, 2,044; colored females, 1,981; total colored, 4,025.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 41 calves, 12 steers, 92 dairy cows, 80 horses, 17 mules, 2 sheep, 164 swine, 1 goat.

HEARD COUNTY.

Heard County was laid out from Troup, Carroll and Coweta in 1830 and named after the Hon. Stephen Heard, who was Governor of Georgia in 1781.

This county is bounded on the north by Carroll, east by Coweta, south by Troup county and west by the State of Alabama.

It is well supplied with streams. The Chattahoochee flows through the county, into which empty the numerous creeks. These streams supply good sport for those fond of the rod and line, and afford valuable water power for running manufactories of various kinds. The smaller game birds are plentiful.

About one-third of the county consists of rich oak and hickory land, while two-thirds are pine mixed with oak and hickory. These latter are

also very productive. The soil is gray sandy, with clay subsoil. Under fair culture it will produce to the acre: seed cotton, 500 to 1,000 pounds; corn, 15 to 30 bushels; wheat and oats, 10 to 20 bushels each; Irish and sweet potatoes, 75 to 100 bushels each; ground-peas, 20 bushels; crab and Bermuda grass, 2,000 pounds each; sorghum syrup, 40 gallons; sugar-cane syrup, 50 to 75 gallons.

According to the United States census of 1900 there were ginned in the county 13,422 bales of upland cotton during the season of 1899-1900.

More attention is being paid to making hay, to the selection of good milch-cows and the raising of improved breeds of beef cattle. Jerseys and Shorthorn Durhams are being imported into the county. In 1890 there were 4,229 cattle, 1,553 of which were milch-cows, with a production of 261,364 gallons of milk, from which were made 68,437 pounds of butter and 20 pounds of cheese. There were in the county 345 oxen.

Poultry raising is not neglected and 62,396 domestic fowls of all kinds in 1890 gave 54,840 dozens of eggs. The honey produced in the same year amounted to 18,858 pounds.

The horses numbered 502, the mules 1,236, donkeys 2, hogs 7,065 and the sheep 1,386, with a wool-clip of 1,227 pounds. The breed of horses is being improved as well as that of cattle.

Vegetables, fruits and melons are raised, but for the lack of railroad facilities scarcely any are being marketed.

The forest trees are large and valuable for building and manufacturing purposes. Numerous sawmills, operated by steam, are utilizing this timber.

There is an abundance of excellent granite.

There are several flour and grist-mills operated by water.

Franklin, the county site, located on the east bank of the Chattahoochee river, has a court-house which cost \$18,000 and a jail valued at \$5,000. The Franklin Collegiate Institute and numerous other schools afford good educational advantages.

The Methodists and Baptists have a large membership and many churches in every part of the county.

The products of the county are marketed in LaGrange, Newnan, Carrollton and Hogansville.

The area of Heard county is 313 square miles, or 200,320 acres.

Population in 1900, 11,177, a gain of 1,620 since 1890; school fund, \$7,412.38.

By the Comptroller-General's report for 1900 there are: acres of improved land, 174,702; of wild land, 7,496; average value per acre of improved lands, \$3.33; of wild lands, \$1.41; city property, \$27,580; money, \$52,107; farm animals, \$135,031; merchandise, \$25,313; plantation and mechanical tools, \$29,177; jewelry, etc., \$1,147; household furniture, \$50,665; value of all other property, \$20,673; real estate, \$620,409; personal estate, \$319,046; aggregate property, \$939,455.

Property returned by colored taxpayers: Number of acres of land,

6,412; value of land, \$19,204; city or town property, \$405; household and kitchen furniture, \$10,089; watches, jewelry, etc., \$81; farm and other animals, \$18,523; plantation and mechanical tools, \$3,324; value of all other property, \$1,302; aggregate value of whole property, \$52,928.

The tax returns of 1901 show an increase of \$33,510 in the value of all property since 1900.

Population of Heard county by sex and color, according to the census of 1900: white males, 3,580; white females, 3,583; total white, 7,163; colored males, 2,020; colored females, 1,994; total colored, 4,014.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 42 calves, 81 steers, 31 dairy cows, 20 horses, 11 mules, 71 swine, 1 goat.

HENRY COUNTY.

Henry County was named in honor of the renowned orator and patriot, Patrick Henry, of Virginia. Its boundaries were defined by the act of 1821. It is bounded on the north by DeKalb county, on the northeast by Rockdale and Newton, on the southeast by Butts, on the south by Spalding and on the west by Clayton.

It is well watered by South river, one of the branches of the Ocmulgee, and by Cotton river; also by Troublesome, Sandy, Towaliga, Indian, Tussahaw, Little Walnut, Line and Reeves creeks.

The lands on these rivers and creeks are rich and produce fine crops. The lands are light, sandy soil in some places, in others mulatto and stiff red soil.

Under fair cultivation the lands of all sorts will average to the acre: seed cotton, 600 to 750 pounds; corn, 15 bushels; oats, 20 bushels; wheat, 10 bushels; rye, 8; barley, 10; Irish potatoes, 50 to 75 bushels; sweet potatoes, 75 to 100 bushels; field-peas, 10 bushels; ground-peas, 20 bushels; crab-grass hay, 3,000 pounds; Bermuda grass hay, 2,500 pounds; clover, 3,000 pounds; corn fodder, 450 pounds; sorghum syrup, 100 gallons; sugar-cane, 150 gallons.

Henry county cotton ranks high in the market and is in great demand with the eastern mills. Many of the lands will yield to the acre 1,500 pounds of seed cotton, 40 bushels of corn, 30 of wheat and other crops in like proportion.

Although there are no regular dairy farms, there are from 1 to 5 cows in almost every family. In 1890 the 1,981 milch-cows of the county produced 500,541 gallons of milk and 221,059 pounds of butter. Among the 4,929 cattle of the county are found many improved breeds. There were 176 working oxen. Poultry raising is profitable and in 1890 there were 95,518 domestic fowls of all sorts, producing 111,735 dozens of eggs. The bee-hives furnished 16,130 pounds of honey.

There were 397 sheep, producing about 535 pounds of wool; 795 horses, 2,190 mules, 5 donkeys and 6,566 hogs.

This is a fine county for all kinds of fruits, but they are raised almost entirely for home consumption.

The watercourses have many fine shoals which offer inducements to erect factories and mills. At Island Shoals a good roller mill for flour and corn is being put in. There are several small country mills for flour and corn. These are run by water. There are no large saw-mills, but several small "traveling" mills. At Hampton there is a new cotton-mill, valued at \$50,000. There is also a knitting mill at the same town, valued at \$18,000. Its capacity is now being doubled. At Locust Grove there is a cotton seed oil-mill, valued at \$25,000.

The people are anxious for manufactories of every kind, especially cotton-mills, cotton seed oil-mills and canneries..

McDonough, the county site, is a progressive town, increasing steadily in population. It has two banks, a court-house worth \$20,000, and a jail which cost \$5,000. It does a prosperous business.

Three railroads run through the county, the Central of Georgia, the Southern and the Columbus division of the Southern, of which division McDonough is the terminus.

The receipts and shipments of cotton for the county amount to 18,000 or 20,000 bales per annum, of which 8,500 are handled in McDonough.

According to the United States census of 1900 there were ginned 20,056 bales of upland cotton in this county during the season of 1899-1900.

The products of the county are handled in McDonough, Hampton and Locust Grove.

The county is well supplied with good schools.

All Christian denominations have churches with good houses of worship and full membership.

The area of Henry county is 337 square miles, or 215,680 acres.

Population in 1900, 18,602, a gain of 2,382 since 1890; school fund, \$12,004.41.

By the Comptroller-General's report for 1900 there are: acres of improved land, 201,903; average value per acre, \$6.17; city property, \$198,855; shares in bank, \$25,000; money, etc., \$231,970; value of merchandise, \$101,085; cotton manufactories, \$6,500; household furniture, \$114,538; farm and other animals, \$202,546; plantation and mechanical tools, \$61,629; watches, jewelry, etc., \$6,599; value of all other property, \$56,181; real estate, \$1,444,951; personal estate, \$848,539; aggregate property, \$2,293,490.

Property returned by colored taxpayers: Number of acres of land, 3,883; value, \$23,886; city property, \$8,145; money, \$200; household furniture, \$16,401; farm and other animals, \$24,896; plantation and mechanical tools, \$513; watches, etc., \$89; value of all other property, \$671; aggregate property, \$79,702.

The tax returns for 1901 show an increase of \$104,633 in the value of all property since 1900.

In the 38 white schools the average attendance is 1,335, and in the 26 colored schools 915.

McDonough district has a population of 2,725, of whom 683 live in the town.

Hampton district has 2,360 inhabitants, of whom 468 live in the town.

Locust Grove district has 1,670 inhabitants, of whom 254 live in the town.

Population of Henry county by sex and color, according to the census of 1900: white males, 4,695; white females, 4,518; total white, 9,213; colored males, 4,699; colored females, 4,690; total colored, 9,389.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 45 calves, 28 steers, 78 dairy cows, 60 horses, 4 mules, 1 donkey, 146 swine, 4 goats.

HOUSTON COUNTY.

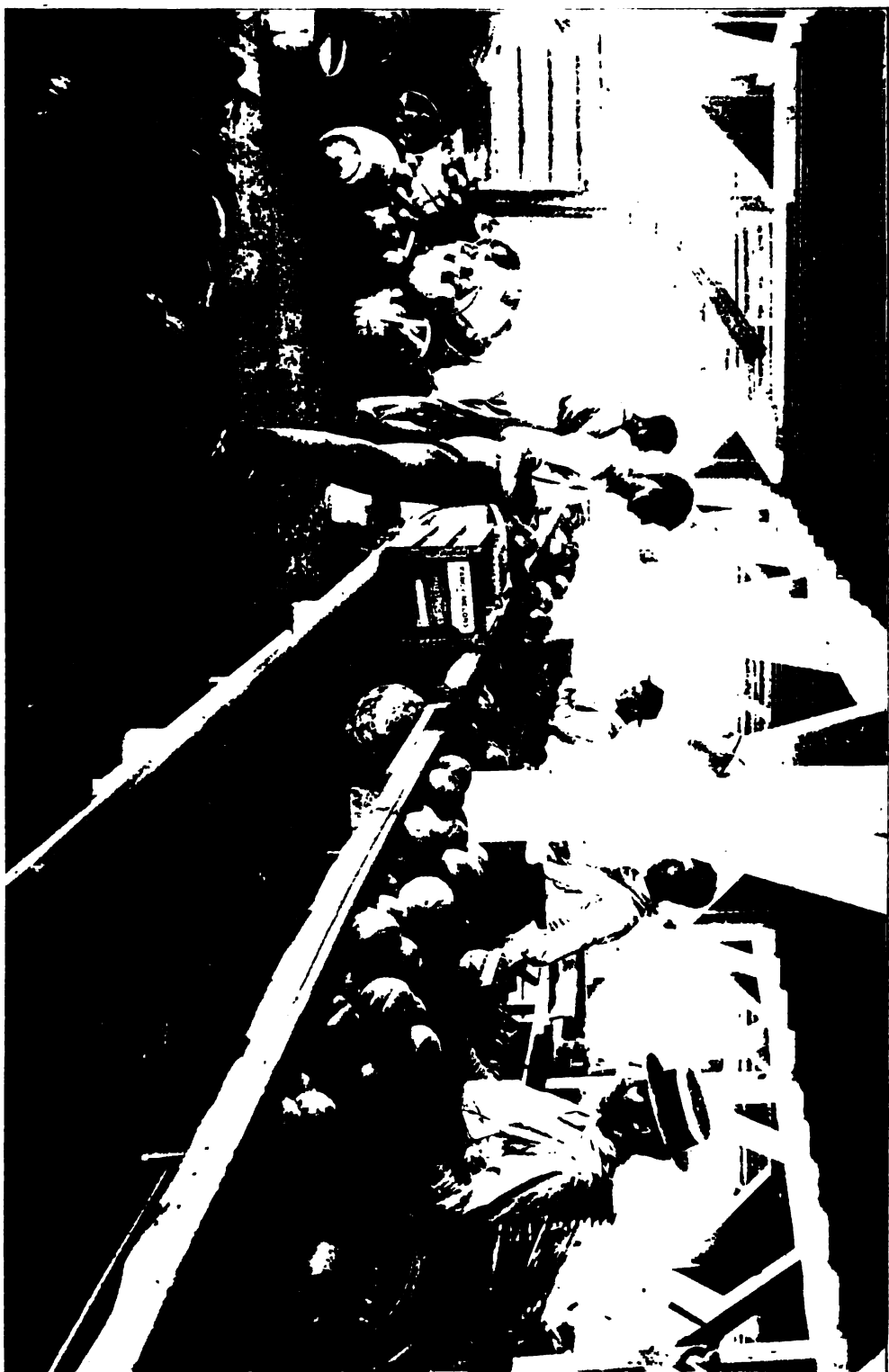
Houston County was organized in 1821 and was named in honor of John Houston, of Chatham county, an ardent patriot of the Revolution and Governor of Georgia in 1778. The Ocmulgee river flows along the eastern border of the county and Echeconnee creek on the north. Other streams are Mossy and Big Indian creeks. Houston county is bounded on the north by Bibb and Twiggs, on the east and southeast by Twiggs and Pulaski, on the south by Dooly, on the west by Macon county and on the northwest by Crawford.

The soil is mainly of the tertiary formation with outcroppings of cretaceous formation in the northern part. The land is a level, sandy loam, mainly limestone, but with outcroppings of red freestone in places. The soil is good, with a retentive clay subsoil; fertile and easily worked.

The land, according to location and culture, will give as an average yield to the acre: seed cotton, 500 to 1,500 pounds; corn, 15 to 50 bushels; oats, 20 to 75; wheat, 10 to 50; rye, 5; Irish potatoes, 200; sweet potatoes, 200; field-peas, 10; ground-peas, 50; crab-grass hay, 3,000 pounds; corn fodder, 100 pounds; sorghum syrup, 200 gallons; sugarcane, 150 gallons of syrup. For winter pasturage arctic grass, rye and barley are used and the native grass for summer.

There are four dairy farms making fair profits. The total number of milch-cows in the county in 1890 was 1,325, about 500 of which are on the dairy farms. The butter produced in 1890 was 66,200 pounds, but is now estimated at 79,400 pounds, and the milk at 275,000 gallons. The county produced 7,483 pounds of honey in 1890. The total of all kinds of poultry was 65,204, and the eggs numbered 103,801 dozens. All the cattle of the county number 3,600. There were 848 horses, 2,984 mules, 4 donkeys, 15,143 hogs and 266 sheep, with a wool-clip of 502 pounds. There were also 160 working oxen. There is great improvement in the breeds of cattle, both for the dairy and for beef.

Considerable attention is paid to trucking. About \$15,000 worth of vegetables and berries are sold from the gardens. About 2,500 acres were



PACKING CANTALOUPE.

devoted to melons during the past season, the average net profit on which varied from \$25 to \$50 per acre.

Houston is the largest peach-growing county in the United States. There were shipped from Fort Valley, during the season of 1898, 850 carloads of peaches, or about 450,000 crates. This at an average of \$2.25 a crate would mean more than \$1,000,000. There are 3,000,000 peach trees in this county, 35,744 apple trees, 13,592 pear trees and 43,745 plum trees. There are 8 vineyards, covering in all 1,000 acres.

The timber products are small; a little yellow pine and some hard wood sawed. There are 8 sawmills whose annual output is worth about \$10,000. The average price of timber is \$8 a thousand feet.

The utilized water-powers are on the tributaries of the Ocmulgee, running 14 mills altogether, some of them flour and grist-mills.

The mineral products are marl and limestone. There are some fine kaolin beds.

Among the manufactories are: a cotton-mill, not in operation, 1 cotton gin manufactory, 1 knitting mill, 1 crate and basket factory, 1 fertilizer factory in operation, 1 plow handle factory, 1 iron foundry, 3 canning factories and 3 turpentine distilleries. More than 200 hands are employed in these various factories.

The three canning factories at Fort Valley put up last season 500,000 cans of fruits and vegetables. In addition to these many of the farms have canneries of their own.

At Grovania, on the Southern Railway, is the fertilizer factory already referred to.

Near Fort Valley is the Merchant Mill, run by water, with patent roller process and having a capacity of 40 barrels of flour per day. Most of the manufactories of the county are in Fort Valley and vicinity.

The knitting-mill, valued at \$10,000, makes ladies' underwear exclusively.

Fort Valley has two banks, one having a capital of \$50,000, and the other of \$25,000.

The population of Fort Valley in 1900 was 2,022. The entire district, which includes the town, has 3,986 inhabitants.

Perry, the county site, is situated partly in Lower Town and partly in Upper Town district, the former having a population of 1,592 and the latter of 1,208, or 2,800 in the two districts. In Perry itself are 650 people. This town has a court-house and other public buildings valued at \$20,000, a bank with a capital of \$25,000 and an oil-mill.

Three branches of the Central of Georgia Railroad go from Fort Valley westward, southwest and southeast, Perry being the terminus of the latter branch.

The county roads are all in good condition, and are worked by the county chain-gang at an annual cost of \$10,000.

The annual receipts of cotton are about 25,000 bales, of which 8,000 are shipped from Fort Valley, and 500 are used in the cotton mill when in operation.

According to the United States census of 1900 there were 20,782

bales of upland cotton ginned in Houston county during the season of 1899-1900.

Methodist and Baptist churches are found in every section of the county, and other Christian denominations are also represented.

The schools of the county are in excellent condition and the average daily attendance is 668 in the 26 schools for whites, and 1,690 in the 33 schools for negroes. In Fort Valley are 180 pupils in the white schools and 350 in those for negroes. In 1900 the State School Commissioner reported the school fund of Houston county to be \$14,701.20.

The area of Houston county is 591 square miles, or 378,240 acres.

The population in 1900 was 22,641, an increase of 1,028 since 1890.

The Comptroller-General reported the following returns for 1900: Acres of improved land, 346,804; of wild land, 13,383; average value per acre of improved land, \$4.14; of wild land, \$0.55; city or town property, \$355,115; shares in bank, \$80,500; money and solvent debts, \$123,130; merchandise, \$99,770; cotton factories, \$15,000; iron works, \$10,900; household and kitchen furniture, \$130,000; farm and other animals, \$212,240; plantation and mechanical tools, \$52,595; watches, jewelry, etc., \$9,210; value of all other property, \$72,670; real estate, \$1,810,353; personal estate, \$810,580; aggregate value of whole property, \$2,620,933.

Property returned by colored taxpayers: Number of acres of land, 14,410; value of land, \$57,768; city or town property, \$14,505; household and kitchen furniture, \$32,370; farm and other animals, \$42,320; plantation and mechanical tools, \$8,910; value of all other property, \$2,525; aggregate value of all property, \$158,398.

The tax returns for 1901 show an increase of \$152,087 in the value of all property since 1900.

Population of Houston county by sex and color, according to the census of 1900: white males, 2,797; white females, 2,838; total white, 5,635; colored males, 8,372; colored females, 8,634; total colored, 17,006.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 13 calves, 18 steers, 2 bulls, 82 dairy cows, 101 horses, 33 mules, 192 swine, 2 goats.

IRWIN COUNTY.

Irwin County was laid out by the lottery act of 1818. A part was set off to Thomas and part to Lowndes in 1825. It received its name from General Jared Irwin, who served his country faithfully in the Revolution, and afterwards in campaigns against the Indians; was a member of the convention which revised the State Constitution in 1789; as Governor in 1796 signed the act rescinding the Yazoo law; was president of the constitutional convention of 1798, which inserted in the State Constitution a clause forbidding the African slave trade as far as Georgia was concerned; was again Governor from November 7th, 1806, to November 9th, 1809; was several times president of the State Senate, holding that honored position at the time of his death in 1818.



TURPENTINE FARM IN SOUTH GEORGIA.

Irwin county is bounded by the following counties: North by Wilcox and Telfair, east and southeast by Coffee, south by Berrien and west by Worth.

The Ocmulgee river flows along its northeastern boundary. The Allapaha river flows from north to south through the center of the county, and Little river is on its western side. Into these rivers numerous creeks of this county empty, of which the principal are Willacoochee, Reed, Lake and Hat. The creeks of the eastern part are among the headwaters of the Satilla river. In these various streams fish are plentiful. In the woods and fields are found quail, turkeys, deer and opossums. Many quail are shipped from Irwin county, and some deer and turkeys.

The soils may be described as red, gray and black gravel, with clay subsoil, the gray predominating. Under a good system of cultivation the lands will produce to the acre: of upland seed cotton, 1,200 pounds; of sea-island, 800 pounds; corn, 20 bushels; wheat, 15 to 20 bushels; oats, 25 to 30 bushels; rye, 12 bushels; rice, from 20 to 100 bushels; field-peas, 20 bushels; ground-peas, from 25 to 100 bushels; sugar-cane syrup, from 200 to 500 gallons; sorghum syrup, 200 gallons; Irish potatoes, from 100 to 150 bushels; sweet potatoes, from 250 to 300 bushels; crab-grass hay, 4,000 pounds; corn fodder, 200 pounds.

The native farmers and the colonists at and near Fitzgerald are paying more attention to hay than ever before. Their testimony is that a bountiful yield of good hay is made from Bermuda, crab and crowfoot grasses, from peavines, cattail millet and velvet beans. For ten months of the year the wiregrass affords excellent wild pastures, and the cultivated grasses are good for eight months.

In addition to a great number of common cattle there are many Jersey cows and Shorthorn Durhams. Great attention is paid to the raising of beef cattle for the market and to the improvement of the breed. Within the last five years 35 Hereford and 3 Shorthorn bulls have been brought into the county. The whole number of cattle in the county in 1890 was 11,152, of which 2,763 were milch-cows. Of these many are Jerseys and Durhams; 190,895 gallons of milk and 14,597 pounds of butter were reported from this county. There were in the county 366 working oxen. In 1890 there were in the county 14,764 sheep, with a wool-clip of 35,984 pounds. There were 501 horses, 539 mules, 5 donkeys (male), 12 jennets and 17,270 swine; 37,189 domestic fowls supplied 45,021 dozens of eggs. The honey product was nearly 6,128 pounds.

Much attention is paid to truck farming, and every known vegetable is raised in the market gardens, as are also berries of every kind. Melons and fruits also are extensively raised and the whole trucking business of the county will not fall far short of \$100,000. The markets for these things are Savannah, Macon and Atlanta, Ga., and Cincinnati, Ohio.

There is one florist establishment at Fitzgerald.

The timbers of Irwin county are yellow pine, white oak, water oak, tulip, juniper, cypress, black-gum, cedar, red oak, ash and hickory, all found in paying quantities.

The annual output of lumber is 113,800,000 superficial feet, at an average price of \$8 a thousand feet. Forty sawmills are employed cutting up this timber, and 25 distilleries are engaged in the manufacture of spirits of turpentine.

Sandstone and phosphate are found in this county.

Irwinville, the county site, is a little village on the Tifton and North-eastern Railroad. At the junction of this same railroad with a branch of the Georgia and Alabama of the Seaboard Air Line system stands the new and growing city of Fitzgerald, built by colonists from the northwestern States. Another railroad, an offshoot of the Hawkinsville and Florida Southern connects Fitzgerald with Davisville in Wilcox county. Fitzgerald has electric lights and water-works worth \$45,000, all paid for, and owned by the city, 2 banks with adequate capital, many prosperous mercantile establishments, 10 life and fire insurance agencies, 1 wagon factory and 3 sash and blind factories. All the stock has been taken for a \$60,000 cotton-mill at Fitzgerald, expected to be soon in operation. The population of Fitzgerald is 1,817. The district, including Fitzgerald, has 2,515 inhabitants.

The facilities in Irwin county for travel and transportation are excellent. Besides 75 miles of railroad, 50 miles of public road have been lately macadamized. The Ocmulgee river also furnishes water transportation by steamboats to Savannah and Brunswick, and to Macon, as soon as the government completes the dredging of the river.

Of the cotton receipts of the entire county 5,000 bales are handled at Fitzgerald, 2,000 at Ocilla and 1,000 at Sycamore. According to the United States census of 1900 1,891 bales of upland and 1,038 bales of sea-island cotton were ginned in Irwin county for the season of 1899-1900.

The public schools are in good condition.

Every Christian denomination is represented by churches in this county, Methodists and Baptists being the most numerous.

The second largest town in the county is Ocilla, with a population of 805 and in the whole district 1,740.

At Cycloneta Station is a farm operated by the Georgia Southern and Florida Railroad, which gives a practical demonstration of the capacity of this county and section in every branch of husbandry. The fruits raised here are especially fine.

The area of Irwin county is 686 square miles, or 439,040 acres.

Population in 1900, 13,645, an increase of 7,329 since 1890; school fund, \$7,590.16; school fund of Fitzgerald, \$1,170.72.

By the Comptroller-General's report for 1900 there are: acres of improved land, 391,648; of wild land, 65,137; average value per acre of improved land, \$2.07; of wild land, \$1.63; city property, \$265,618; shares in bank, \$13,415; money, etc., \$222,442; merchandise, \$96,626; stocks and bonds, \$793; cotton manufactories, \$32,070; iron works, \$112.00; invested in mining, \$302.00; household and kitchen furniture, \$95,620; farm and other animals, \$235,779; plantation and mechanical tools, \$39,480; watches, jewelry, etc., \$6,797; value of all other prop-

erty, \$226,127; real estate, \$1,183,535; personal estate, \$973,364. Aggregate value of whole property, \$2,156,899.

Property returned by colored taxpayers: Number of acres of land, 12,137; value, \$21,113; city property, \$3,190; money, etc., \$465; merchandise, \$106; household furniture, \$7,288; watches, etc., \$194; farm animals, \$10,865; plantation and mechanical tools, \$1,751; value of all other property, \$1,098; aggregate property, \$46,770.

The tax returns for 1901 show an increase of \$134,259 in the value of all property since the returns of 1900.

In the 61 white schools the average attendance is 1,065, and in the 22 colored schools it is 409. In the white schools of Fitzgerald are enrolled 496 pupils, and in the schools for negroes there are enrolled 127.

On the 13th of July, 1836, on the Allapaha river, near the plantation of Mr. Wm. H. Mitchell, Captain Levi J. Knight, commanding a company of 75 white men, attacked a party of Indians, and killed all but five of them. Twenty-three guns and nineteen packs of plunder fell into the hands of the whites.

Population of Irwin county by sex and color, according to the census of 1900: white males, 4,721; white females, 4,239; total white, 8,960; colored males, 2,610; colored females, 2,075; total colored, 4,685.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 52 calves, 11 steers, 4 bulls, 114 dairy cows, 130 horses, 11 mules, 242 swine, 1 goat.

JACKSON COUNTY.

Jackson County was formed in 1796 and was named for General James Jackson, of Savannah, one of the most gallant of Georgia's soldiers in the Revolution, who aided in forming a constitution and government for the State, and was a member of the legislature, a Representative and Senator in Congress, and Governor of the State. From part of this county was formed the county of Clarke. A part of it helped to form Madison county in 1811, and part was added to Walton, Gwinnett and Hall in 1818.

Jackson county is bounded on the northeast by Banks county, on the east by Madison, on the southeast by Clarke and Oconee, on the southwest by Walton and Gwinnett and on the northwest by Hall.

Several branches of the Oconee river water this county. Big Sandy, Mulberry, Barber's, Curry's and Beach creeks are some of the streams. On all these streams the lands are very productive. The uplands are not so fertile as the bottom lands, but with careful cultivation yield well. The soils are red and gray. With proper culture they will average to the acre: corn, 15 bushels; oats, 25; wheat, 12; rye, 10; barley, 15; Irish potatoes, 60; sweet potatoes, 75; field-peas, 10; ground-peas, 30; seed cotton, 600 pounds; crab-grass hay, 2,000 pounds; corn fodder, 200 pounds; sorghum syrup, 150 gallons. Some of the best lands produce to the acre: 25 bushels of corn, 100 bushels of Irish potatoes, 150 of sweet potatoes and 1,500 pounds of seed cotton. When lands are well pre-

pared they produce well sorghum and corn forage, millet, red clover, Bermuda, crab-grass and pea-vines.

Some ensilage is stored away in silos, especially by the two dairy farms. Among the milch-cows are many Jerseys and Guernseys. More attention than ever before is being given to the improvement of the breeds of dairy and beef cattle. The total number of cattle in the county in 1890 was 7,164. The milch-cows numbered 3,038 and produced 896,567 gallons of milk, 301,758 pounds of butter and 25 pounds of cheese. There were 1,587 horses, 1,884 mules, 5 donkeys and 8,418 hogs. The 1,709 sheep produced 2,466 pounds of wool. There were 134,490 domestic fowls of all kinds, whose production of eggs amounted to 167,834 dozens; 21,389 pounds of honey were produced in 1890. There were also 378 working oxen.

Vegetables, fruits, berries and melons are used in abundance for home consumption, but none for the markets.

There are 7 vineyards embracing 75 acres altogether. The revenue derived from the wine amounts to about \$4,000 annually.

The timber consists of pine, red oak, post oak, water oak, white oak, hickory, poplar, dogwood, persimmon, beach, birch and ash. The annual output of lumber in superficial feet is 300,000 at an average of \$7 a thousand. This lumber is used in various manufactories that work in wood.

There are in this county the following manufacturing establishments: At Harmony Grove, one wagon and buggy factory, one harness factory, one cotton-seed oil-mill, with a capital of \$30,000, one mattress factory, two potteries for manufacturing jugs, jars, etc., and one cotton mill with a capital of \$100,000; at Jefferson, one cotton mill with a capital of \$80,000, a cotton-seed oil-mill with a capital of \$18,000, and a foundry; at Maysville, a chair factory; at Hoschton, one tannery and harness and saddle factory. There are also in Jackson county six sawmills and 20 flour and gristmills. There is also a factory being organized at Winder, a town of 1,145 inhabitants, the greater part of which is in Jackson county, though a small part of it lies in Gwinnett and another small part in Walton county.

There are 4 banks, 1 each at Harmony Grove, Winder, Jefferson and Maysville.

About 15 life and fire insurance agencies are in the county.

The county abounds in granite and quartz, soapstone, asbestos and tourmaline. There is also some iron ore, but it is not now being worked. It was mined some during the civil war.

Jefferson, named for Thomas Jefferson, of Virginia, the author of the declaration of independence, is the county site. It is situated on the waters of the Oconee and was incorporated in 1812. It contains 726 inhabitants, but, if we include the district of the same name, 2,107.

Harmony Grove is a thriving town of 1,454 inhabitants, and the district of Minish, which includes the town, has a population of 3,487.

The Methodists and Baptists are the leading Christian denominations. All sects are represented.

There are several fine schools, of which the Martin Institute at Jefferson is the most noted. The average attendance on the public schools is in the 80 white schools 2,452, and in the 24 colored schools 781.

There are three railroads in the county, the Southern, the Gainesville, Jefferson and Southern and the Seaboard Air Line.

The county roads are in good condition, but not macadamized.

The cotton receipts from the entire county are about 50,000 bales, of which 3,000 are shipped from Jefferson, 15,000 from Harmony Grove, 12,000 from Winder, 5,000 from Hoschton, 2,000 from Pendergrass, 3,000 from Maysville, 3,000 to Gainesville and 7,000 to Athens. The cotton mills use about 3,000 bales. According to the United States census of 1900 there were ginned in this county 22,866 bales of upland cotton during the season of 1899-1900.

The area of Jackson county is 460 square miles, or 294,400 acres.

Population in 1900, 24,039, a gain of 4,863 since 1890; school fund, \$16,832.35.

By the Comptroller-General's report for 1900 there are: acres of improved land, 242,469; average value per acre, \$5.95; city property, \$332,715; shares in bank, \$110,000; money, \$311,382; merchandise, \$140,034; iron works, \$4,000; stocks and bonds, \$11,750; cotton manufactories, \$142,460; household furniture, \$121,056; farm and other animals, \$232,944; plantation and mechanical tools, \$63,493; watches, jewelry, etc., \$6,157; value of all other property, \$44,545; real estate, \$1,775,852; personal estate, \$1,217,427. Aggregate property, \$2,993,277.

Property returned by colored taxpayers: Number of acres of land, 4,924; value, \$25,400; city property, \$3,190; money, \$105; household furniture, \$6,313; farm and other animals, \$15,068; plantation and mechanical tools, \$2,580; watches, jewelry, etc., \$81; value of all other property, \$490; aggregate value of property, \$51,587.

The tax returns of 1901 show an increase of \$180,193 in the value of all property since the returns of 1900.

Population of Jackson county by sex and color, according to the census of 1900: white males, 8,223; white females, 8,210; total white, 16,433; colored males, 3,808; colored females, 3,798; total colored, 7,606.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 57 calves, 7 steers, 1 bull, 151 dairy cows, 120 horses, 27 mules, 1 sheep, 313 swine, 4 goats.

JASPER COUNTY.

Jasper County was laid off by the name of Randolph in 1807, but the name was changed to Jasper in 1812, in honor of Sergeant Jasper, so renowned for his patriotic devotion in the war for independence. In 1815 a part of the county was set off to Morgan, and in 1821 a part to Newton. The Ocmulgee river, which divides the county from Butts and Monroe, is the principal stream. Other streams are, Rocky, Falling, Cedar, Murder, Shoal, White Oak, Wolf and Panther creeks and Alcovy river.

This county is bounded on the northeast by Morgan county, on the east by Putnam, south by Jones, southwest by Monroe, west by Butts, and northwest by Newton.

The lands are generally rolling, especially in the eastern part, those near the streams being rich. The southern part of the county has a gray soil. The lands, properly cultivated, will give as an average yield to the acre: seed cotton, 500 to 750 pounds; corn, 15 to 20 bushels; oats, 20; wheat 10 to 12; rye, 20; barley, 25; Irish potatoes, 125; sweet potatoes, 200; field-peas, 20; ground-peas, 50; crab-grass, 4,000 pounds; Bermuda grass, 4,000 to 6,000 pounds; cane syrup, from 200 to 300 gallons; sorghum, 150 gallons. Much hay is saved and marketed.

Considerable attention is paid to cattle for milk and butter, and the Jersey is preferred. In 1890 the cattle of the county numbered 4,304, of which 1,904 were milch-cows, producing 495,650 gallons of milk and 148,666 pounds of butter. There were also 105 working oxen. The domestic fowls of all kinds numbered 68,035, and produced 65,463 dozens of eggs. From the bee-hives were obtained 15,555 pounds of honey. There were 1,000 sheep, with a wool-clip of 1,404 pounds. The county had also 733 horses, 2,006 mules, 3 donkeys, 6 jennets and 9,408 hogs.

Vegetables, fruits and melons are raised for home consumption. There are 10,000 acres devoted to peaches, and 2,000 to apples. About 200 acres are devoted to grapes.

The Ocmulgee and Alcovy rivers and Murder creek furnish immense water-powers, some of which are used by 5 grist-mills. The few sawmills of the county are operated by steam.

There are at Monticello a harness and collar factory and a bobbin factory. A company has been formed for the erection of a cotton-mill at Monticello. This town, which is the county site, is on the Macon and Northern Railroad, a branch of the Central of Georgia system. Another branch of this same system runs across the northeastern section of the county. Other growing towns of the county are Hillsboro and Shady Dale.

Methodists, Baptists and Presbyterians are the leading Christian denominations.

The county roads are in excellent condition, and the two railroads give good facilities for travel and transportation.

The schools of the county are well maintained. The average attendance is 855 in 30 white schools and 997 in the 25 colored schools.

The cotton receipts reach 15,000 bales, about 10,000 of which are handled in Monticello, where the merchants have the advantage of two good banks. According to the United States census of 1900 there were ginned in Jasper county 15,320 bales of upland cotton of the crop of 1899-1900. Other towns at which products of the county are marketed are Shady Dale, Machen and Hillsboro.

Monticello is the county site and contains 1,106 inhabitants. The en-

tire Monticello district has a population of 2,297. There is a large harness factory here.

The area of Jasper county is 410 square miles, or 262,400 acres.

Population in 1900, 15,033, a gain of 1,154 since 1890; school fund, \$9,795.02.

By the Comptroller-General's report for 1900 there are: acres of improved land, 227,095; average value per acre, \$3.37; city property, \$155,295; shares in bank, \$47,295; money, etc., \$124,811; merchandise, \$62,313; invested in shipping, \$25; stocks and bonds, \$2,000; cotton manufactories, \$3,372; iron works, \$1,015; household furniture, \$72,194; farm and other animals, \$126,488; plantation and mechanical tools, \$34,764; watches, jewelry, etc., \$5,362; value of all other property, \$36,119; real estate, \$921,891; personal estate, \$564,819; aggregate of all property, \$1,486,710.

Property returned by colored tax-payers: Number of acres of land, 5,534; value, \$20,454; city property, \$6,334; money, etc., \$135; household furniture, \$11,379; farm and other animals, \$25,666; plantation and mechanical tools, \$5,857; value of all other property, \$1,570; aggregate of all property, \$73,909.

The tax returns for 1901 show an increase of \$175,378 in the value of all property since the returns of 1900.

Population of Jasper county by sex and color, according to the census of 1900: white males, 2,767; white females, 2,621; total white, 5,388; colored males, 4,644; colored females, 4,806; total colored, 9,645.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 6 calves, 2 steers, 37 dairy cows, 39 horses, 22 mules, 30 swine.

JEFFERSON COUNTY.

Jefferson County was laid out from Burke and Warren in 1796, and was named in honor of Thomas Jefferson, of Virginia, author of the declaration of independence and President of the United States from March 4th, 1801, to March 4th, 1809. It is bounded on the north by Richmond and McDuffie counties, on the east by Burke county, on the south by Emanuel and Johnson counties, on the west by Washington county, and on the northwest by Glascock and Warren counties.

The Ogeechee river runs through the county, and before the building of the Central Railway was the medium of traffic with Savannah. Other streams are Rocky Comfort, Williamson's, Brier and Big creeks.

The soils vary from sandy to clay, being gray or red in different sections, and well adapted to the staple crops of Georgia and to forage crops of all kinds. The best lands of the county are devoted to cotton and corn, which are by many cultivated almost to the exclusion of other crops.

The average yield to the acre, varying according to soil and cultivation, is: seed cotton, 450 to 750 pounds; corn, 10 to 25 bushels; wheat, 8 to 15 bushels; oats, from 12 to 30 bushels; rye, from 6 to 10 bushels; Irish and sweet potatoes, from 100 to 300 bushels each; field peas, from

6 to 10 bushels; ground-peas, 50 bushels; crab-grass hay, 4,000 pounds; corn fodder, stalk and blade (shredded corn), 4,000 pounds; sorghum syrup, 300 gallons; ribbon-cane syrup, 400 gallons.

Some lands in the county in the season of 1899 by careful culture produced 1,500 pounds of seed cotton to the acre, and some of the best lands average that much every year and produce other crops in like proportion. Very little attention has been paid to the grasses, but wherever tried, they have been grown with great success. For summer pasturage Bermuda and crab-grass are best, and often afford abundant feed from the last of March to the 1st of December. In winter the cattle find nourishing food in the cane which abounds in the branches, creeks and swamps. Cotton seed meal and hulls are considerably used as food for stock. Very little attention has been paid so far to the rearing of beef cattle, but more than formerly. Those farmers who pay special attention to their milch-cows prefer the Jersey.

In 1890 there were in Jefferson county 1,973 sheep, with a wool-clip of 4,233 pounds; 5,490 cattle, 1,738 milch-cows, producing 257,710 gallons of milk and 43,355 pounds of butter. There were also 286 working oxen, 1,149 horses, 1,900 mules, 32 donkeys, 16,883 swine, and domestic fowls of all kinds, 43,049, producing 86,604 dozens of eggs. The honey produced was 13,645 pounds.

The truck marketed is valued at \$7,000, and consists of vegetables, fruits, berries and melons. There are 10,930 peach and 1,525 apple trees.

The timber growth is mixed, long-leaf pine and hardwoods, with the usual swamp growth on the watercourses. The annual output of all timber sawed is about 750,000 superficial feet, at prices ranging from \$6 to \$8 a thousand feet. There are eight sawmills nearly all operated by steam.

Nine grist-mills along the Ogeechee river use 189 horse-powers. There are two large roller mills for flour operated by steam.

Shell marl and limestone are found in several localities. Buhrstone of excellent quality is found near Louisville. Agate and chalcedony have also been found. In some sections the water is freestone, in others limestone.

There are in Jefferson county 12 artesian wells and 3 mineral springs.

This is a fine old county, having been at one time very productive. Lands that had been exhausted, have of late years been built up again by judicious rotation of crops. In this process the cowpea has played a prominent part.

Louisville, the county site, with a population of 1,009, in the corporate limits and 1,574 in its entire district, is the terminus of the Louisville and Wadley Railroad, which connects it with Wadley, a growing town on the Central of Georgia. This latter railroad traverses the southern part of Jefferson county. Across the northern part runs a branch of the Southern Railway.

Louisville was the capital of Georgia from 1795 until 1804, when

Milledgeville became the seat of government. The court-house, valued at \$10,000, is built of the materials which formerly composed the State House. It was at Louisville that the Yazoo act was passed, and here by the act of a subsequent legislature it was rescinded, and all the papers and evidence connected with it were burned in front of the capitol in the presence of the Governor and both houses of the legislature, and a large concourse of people gathered from all the country around.

The schools of this county are in good condition.

Methodists, Baptists and Presbyterians have each good churches and a large membership, both in town and country.

In the public schools the average attendance is 997 in the 28 schools for whites and 808 in the 18 schools for negroes.

Besides the excellent facilities afforded by the railroads, the county roads are in fine condition and well cared for under the new road law of Georgia.

The receipts and shipments of cotton in Jefferson county are about 25,000 bales. Of this number about 6,000 are handled at Louisville, the rest at Wadley, Bartow, Wren's, Spread and Averay. According to the United States census of 1900 there were ginned in this county 21,182 bales of upland cotton during the season of 1899-1900.

The second largest town in the county is Wadley, with a population of 630 in the corporate limits and 2,815 in the entire district.

The area of Jefferson county is 686 square miles, or 439,040 acres.

The population in 1900 was 18,212, a gain of 999 since 1890; school fund, \$12,754.34.

The Comptroller-General gave the following returns for 1900: Acres of improved land, 311,060; average value per acre, \$3.08; city property, \$279,420; shares in bank, \$22,500; money, etc., \$286,380; merchandise, \$95,710; stocks and bonds, \$3,900; household furniture, \$109,104; farm and other animals, \$210,755; plantation and mechanical tools, \$50,834; watches, jewelry, etc., \$8,475; value of all other property, \$42,501; real estate, \$1,240,024; personal estate, \$870,574; aggregate property, \$2,110,598.

Property returned by colored taxpayers: Number of acres of land, 8,517; value of same, \$24,859; city property, \$10,405; money, etc., \$270; merchandise, \$105; household furniture, \$22,081; farm and other animals, \$35,950; plantation and mechanical tools, \$8,899; watches, jewelry, etc., \$250; value of all other property, \$2,336; aggregate property, \$105,155.

The tax returns for 1901 show a gain in the value of all property over the returns of 1900 amounting to \$84,891.

Population of Jefferson county by sex and color, according to the census of 1900: white males, 3,377; white females, 3,257; total white, 6,634; colored males, 5,628; colored females, 5,950; total colored, 11,578.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 70 calves, 37 steers, 2 bulls, 130 dairy cows, 98 horses, 12 mules, 475 swine, 24 goats.

JOHNSON COUNTY.

Johnson County was laid off from Laurens and Emanuel counties in 1858, and was named in honor of Herschel V. Johnson, a distinguished son of Georgia, Governor of the State from 1853 to 1857, then judge of the Ocmulgee circuit and in 1860 on the ticket for Vice-President with Stephen A. Douglas, of Illinois.

Johnson county is bounded by the following counties: Washington on the north, Jefferson on the northeast, Emanuel on the east and south-east, Laurens on the south and southwest, and Laurens and Wilkinson on the west.

The Oconee river is on its western border and the Ohoopsee flows through the center. Other streams are Dry, Cedar and Yamgrandee creeks.

The face of the country is level. The lands are easily cultivated, and under proper tillage produce to the acre the following averages: Seed cotton, upland, 500 pounds; sea-island cotton, 300 pounds; corn, 10 bushels; oats, 25 bushels; wheat, 10 bushels; rye, 4 bushels; Irish potatoes, 100 bushels; sweet potatoes, 200 bushels; field-peas, 20 bushels; ground-peas, 40 bushels; crab-grass hay, 2,500 pounds; corn fodder, 150 pounds; sorghum syrup, 200 gallons; sugar-cane syrup, 250 gallons. The hay crop of this county is made from crab-grass and the peavine.

Though very little attention is given to the rearing of beef cattle, yet some care is taken in the improvement of the breed, and the Devon cow is being brought in as a milker. Both Devon and Jersey bulls have been introduced of late years.

The native grasses and the woods give a pretty good range for stock.

In 1890 there were in Johnson county 4,233 sheep, with a wool-clip of 8,867 pounds; 3,224 cattle, 1,053 milch-cows, producing 89,562 gallons of milk, but only 2,817 pounds of butter. The working oxen numbered 165. The domestic fowls of all kinds numbered 24,248 and produced 35,080 dozens of eggs. Of other live stock there were 593 horses, 504 mules, 3 donkeys and 7,706 hogs. The honey produced was 920 pounds.

Vegetables, fruits, berries and melons are raised in considerable quantities, but only for home consumption. The same is true of grapes.

About 50 per cent. of the original forests, mostly pine, are still standing. A great quantity of lumber is cut and shipped to Savannah and many sawmills are kept busy preparing it. Rosin and turpentine are among the most remunerative products of this county. Two distilleries are in constant operation preparing spirits of turpentine.

There are no mineral springs, but there are two artesian wells.

The Wrightsville and Tennille Railroad runs through the center of the county, and through its eastern side runs the Wadley and Mount Vernon, each connecting with the Central of Georgia Railroad.

Wrightsville, the county site, with a population of 1,127 in the corporate limits and 3,614 in the district, has a court-house worth \$20,000, and a good school building, the Nannie Lou Worthen Institute, valued

at \$8,000. The town has also several successful merchants and several life and fire insurance agencies. About 15,000 bales of cotton are received in this county and shipped from it. Of these 5,000 are handled at Wrightsville. According to the United States census of 1900 there were ginned in this county 8,336 bales of upland cotton of the crop of 1899-1900.

There has been much improvement in educational matters. The schools belong for the most part to the public school system of Georgia, and the average attendance is 844 in the 32 schools for whites and 364 in the 16 schools for colored pupils.

There are members of the various Christian denominations in this county. The Methodists and Baptists predominate.

Besides Wrightsville there are other post-offices, as Ethel, Hodo, Kite, Kittrell, Nasworthy, Regnant and Spann.

The area of Johnson county is 258 square miles, or 165,120 acres.

Population in 1900, 11,409, an increase of 5,280 since 1890; school fund, \$7,254.12.

By the Comptroller-General's report for 1900 there are: acres of improved land, 173,816; of wild land, 5,539; average value per acre of improved land, \$2.66; of wild land, \$1.21; city property, \$122,423; shares in bank, \$21,900; money, etc., \$91,746; merchandise, \$49,142; household furniture, \$68,374; farm and other animals, \$154,638; plantation and mechanical tools, \$34,756; watches, jewelry, etc., \$5,048; value of all other property, \$42,327; real estate, \$592,725; personal estate, \$481,332; aggregate property, \$1,074,057.

Returns of property by colored taxpayers: Number of acres of land, 3,535; value, \$8,276; city property, \$2,020; money, etc., \$125; household furniture, \$6,402; farm and other animals, \$12,361; plantation and mechanical tools, \$2,763; watches, jewelry, etc., \$99; value of all other property, \$758; aggregate property, \$32,819.

The tax returns of 1901 show an increase of \$61,641, in the value of all property, over the returns of 1900.

Population of Johnson county by sex and color, according to the census of 1900: white males, 3,487; white females, 3,391; total white, 6,878; colored males, 2,291; colored females, 2,240; total colored, 4,531.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 39 calves, 14 steers, 2 bulls, 77 dairy cows, 53 horses, 17 mules, 341 swine, 15 goats.

JONES COUNTY.

Jones County was laid out in 1807 and named for Hon. James Jones, of Chatham county. A part was added to it from Putnam in 1810 and a part was given to Bibb in 1822.

This county is bounded on the north by Jasper and Putnam, on the east by Baldwin, on the south by Wilkinson, Twiggs and Bibb, on the west by Bibb and Monroe. The Ocmulgee river runs along its western border. There are in the county several creeks.

The general character of the soil is metamorphic. Gray surface soil predominates. There is a belt of stiff red clay land north and south through the center of the county. An impervious red clay subsoil underlies the whole formation. The surface is rolling and broken. The fine, dark mulatto lands of this county were once regarded among the best in the State. By injudicious cultivation they lost much of their fertility; but under improved methods they are being gradually brought back to their former productiveness. With proper culture the average production to the acre is: corn, 15 to 20 bushels; oats, 25 to 30; wheat, 12 to 15; rye, 6 to 10; barley, 40 to 50; Irish and sweet potatoes, 100 each; field-peas, 10 to 20; ground-peas, 40 to 50; seed cotton, 600 pounds; crab-grass, from 2,000 to 3,000 pounds; Bermuda grass, 4,000 pounds; clover, 4,000 to 5,000 pounds; corn fodder, stalk and blade, 4,000 to 6,000 pounds; sorghum syrup and sugar-cane syrup, 150 gallons each. Considerable attention is paid to hay.

Vegetables, berries, fruits and melons are raised, mostly for home consumption. Some are sold and the truck marketed brings about \$4,000. The peach trees number 28,291, and the apple trees 6,635.

In 1890 there were in Jones county 554 sheep, with a wool-clip of 1,118 pounds; 5,031 cattle, 108 working oxen, 1,982 milch-cows, producing 450,147 gallons of milk, from which were made 115,252 pounds of butter; 59,183 domestic fowls of all kinds, producing 59,638 dozens of eggs, 11,591 hogs, 615 horses, 1,847 mules and 1 donkey. The county also produced 11,581 pounds of honey.

According to the census of 1900 there were ginned in Jones county 11,130 bales of upland cotton during the season of 1899-1900.

The timber products are light; hardwoods and short-leaf pines, hickory and oak. On streams poplar and white oak are sawed, employing 5 or 6 small sawmills. The value of the output is about \$5,000. There are on the tributaries of the Oconee 4 grist-mills, using 98 horse-powers.

All the manufactories of the county, about 9, have an annual output worth \$29,000.

There is in this county a fine vein of kaolin, which is being utilized.

The main trunk of the Central of Georgia Railroad runs along the southern border of this county, while a branch of the Central and one of the Georgia Railroad traverse its center, one running northwest, the other northeast.

Clinton, the county site, is located not far from the branch of the Central railway.

In the public school system there is in the 33 schools for whites an average attendance of 607, and in the 30 for colored an average of 765.

Methodists, Baptists and Presbyterians predominate among Christian denominations.

The area of Jones county is 397 square miles, or 254,080 acres.

Population in 1900, 13,358, an increase of 649 since 1890; school fund, \$10,356.53.

By the Comptroller-General's report for 1900 there are: acres of improved land, 244,619; average value per acre, \$2.97; city property,

\$23,615; money, etc., \$41,119; merchandise, \$17,210; cotton manufacturing, \$66,000; household furniture, \$45,794; farm animals, \$119,078; plantation and mechanical tools, \$22,935; watches, jewelry, etc., \$3,892; value of all other property, \$24,881; real estate, \$749,936; personal estate, \$354,344; aggregate property, \$1,104,280.

Property returned by colored tax-payers: Number of acres of land, 11,629; value, \$35,212; city property, \$2,407; money, etc., \$44; merchandise, \$215; household furniture, \$8,968; farm and other animals, \$26,513; plantation and mechanical tools, \$4,171; watches, jewelry, etc., \$335; value of all other property, \$1,050. Aggregate property, \$88,628.

The tax returns for 1901 show a decrease of \$8,050 in the value of all property, as compared with the returns of 1900.

Population of Jones county by sex and color according to the census of 1900: white males, 1,956; white females, 1,952; total whites, 3,908; colored males, 4,644; colored females, 4,806; total colored, 9,450.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 9 calves, 2 steers, 1 bull, 39 dairy cows, 26 horses, 2 mules, 80 swine.

LAURENS COUNTY.

Laurens County was laid out in 1807. Portions of it were added to Pulaski in 1808 and 1809. It was named in honor of Lieutenant-Colonel John Laurens of South Carolina, who was born in the city of Charleston in 1755. He was aide-de-camp to General Washington and was greatly distinguished at the battle of Brandywine, Germantown and Monmouth. On the 27th of August, 1782, while serving under General Nathaniel Greene, he was mortally wounded in a skirmish near Combahee, South Carolina. Laurens county is bounded by the following counties: Johnson and Wilkinson on the north, Johnson, Emanuel and Montgomery on the east, Montgomery and Dodge on the south and Dodge and Pulaski on the west.

The Oconee river and several of its tributary creeks, as Okeewalkee, Palmetto, Turkey and others, run through the county, which is also watered by Alligator creek, a tributary of the Little Ocmulgee, which empties into the Ocmulgee river not far from its junction with the Oconee.

The face of the country is rolling. The soil has a clay foundation with sand and vegetable mould in the pine lands and lime in the oak lands. The lands are very fertile, and under good cultivation give an average yield to the acre as follows: seed cotton (upland), 800 pounds and sea-island, 500; wheat, 15 to 20 bushels, corn, 20 bushels; oats, 40 bushels; rye, 15; barley, 25; Irish potatoes, 200; sweet potatoes, 300; field-peas, 50; ground-peas, 75; crab-grass hay, 6,000 pounds; Bermuda hay, 6,000 pounds; corn fodder, 300 pounds; sorghum syrup, 150 gallons, and sugar-cane syrup, 300 gallons. Considerable attention is being paid to the grasses and forage crops. Pea-vine hay, as elsewhere in the State, is greatly prized. According to the census of 1900 there were ginned in this county, 22,080 bales of upland cotton for the season of 1899-1900.

All known varieties of vegetables of the best quality are grown in this county.

Some attention is being paid to pure bred cattle and sheep. In 1890 the county had 13,100 sheep with a wool-clip of 9,050 pounds; 8,497 cattle, 619 working oxen, 2,815 milch-cows, with a production of 292,895 gallons of milk, but only 16,586 pounds of butter; 1,221 horses, 1,223 mules, 1 donkey, 20,461 swine, and 51,417 poultry, producing 77,876 dozens of eggs. The county also produced 7,034 pounds of honey.

The finest fruits are produced in great abundance.

The timbers are fine, and afford great quantities of lumber, rosin and turpentine for export to Savannah. This timber is worked up by a large number of sawmills, and the naval stores are prepared by 15 turpentine distilleries.

The rivers and swamps afford abundance of fish and game.

Dublin, the county site, located a half mile from the Oconee river, at the junction of the Macon, Dublin and Savannah Railroad, with the Wrightsville and Tennille, is a thriving and rapidly growing town with 2 banks, several fine mercantile establishments, a new cotton-mill with a capital of \$100,000, a furniture factory, ice factory, variety works, brick company, a foundry, shingle machine, stove factory, a cotton seed oil-mill, a ham packing establishment, a nursery company and several small industries. The population of Dublin by the census of 1900 is 2,987 in its corporate limits, and 6,298 in the entire district. The Methodists and Baptists have fine churches in the city and numerous church edifices in the county. Presbyterians, Episcopalians, and other Christian sects are represented. There are good schools in the city and county. The average attendance is 2,689 in 84 white schools and 1,368 in 34 colored schools.

In addition to the railroads already mentioned, are the Wadley and Mount Vernon, and the Pineora Railroads, the last-named being a stem of the Central of Georgia system.

General David Blackshear, who was born in Jones county, North Carolina, January 31, 1764, settled in this county in 1790. He was distinguished for valuable services in the campaign against the Creek Indians during the second war with England.

Hon. George M. Troup, so distinguished in the annals of Georgia, was a resident of this county.

The area of Laurens county is 791 square miles, or 506,240 acres. Population in 1900, 25,908, a gain of 12,161 since 1890; school fund, \$17,504.43.

By the Comptroller-General's report for 1900 there are: acres of improved land, 432,516; of wild land, 85,356; average value to the acre of improved land, \$2.72; of wild land, \$1.18; city property, \$484,100; bank stock, \$92,700; money, etc., \$443,110; merchandise, \$163,393; stocks and bonds, \$3,600; cotton manufactories, \$18,715; iron works, \$2,600; household furniture, \$183,907; farm animals, \$321,400; plantation and mechanical tools, \$66,606; watches, jewelry, etc., \$10,460;

value of all other property, \$154,086; real estate, \$1,771,088; personal estate, \$1,486,474. Aggregate value of whole property, \$3,257,562.

Property returned by colored taxpayers: number of acres of land, 18,809; value, \$54,079; city property, \$10,196; money, etc., \$2,046; merchandise, \$260; household furniture, \$21,355; farm animals, \$38,483; watches, jewelry, etc., \$375; plantation and mechanical tools, \$8,716; value of all other property, \$3,834. Aggregate value of whole property, \$139,410.

The tax returns for 1901 show a gain in the value of all property over the returns of 1900, amounting to \$122,594.

Population of Laurens county by sex and color according to the census of 1900: white males, 7,478; white females, 7,091; total white, 14,569; colored males, 5,711; colored females, 5,622; total colored, 11,339.

Population of Dublin city by sex and color according to the census of 1900: white males, 940; white females, 895; total white, 1,835; colored males, 531; colored females, 621; total colored, 1,152.

Total population of Dublin, 2,987.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 44 calves, 119 steers, 10 bulls, 182 dairy cows, 215 horses, 198 mules, 8 donkeys, 834 swine, 19 goats.

LEE COUNTY.

Lee County was laid out in 1826, and was named in honor of Richard Henry Lee of Virginia, who, in his place in the Continental Congress on the 7th of June, 1776, moved that the colonies declare themselves free and independent. A part of this county was set off to Muscogee and Marion in 1827, and at the same time a part was added to it from Dooly. A part of it was given to Randolph county in 1828, and a part to Sumter in 1835. It is bounded by the following counties; Sumter on the north, Dooly and Worth on the east, Dougherty on the south and Terrell on the west. Flint river forms its eastern boundary. Kinchafoonee and Muckalee creeks, flowing through the center of the county, unite in the northern part of Dougherty and fall into the Flint river just above the city of Albany.

The soil consists of sandy, sandy loam and red clay lands, and those along the streams are very rich and productive. According to the location, culture and fertility these lands make an average yield to the acre as follows: corn, 8 to 20 bushels; oats, 12 to 30; wheat, 8 to 12; rye, 20 to 25; Irish potatoes, 100; sweet potatoes, 200 to 300; field-peas, 25 to 50; ground-peas, 50 to 75; upland seed cotton, 500 to 1,000 pounds; sugar-cane syrup, 200 to 300 gallons; crab-grass hay, 4,000 pounds; corn fodder, 400 pounds. Bermuda and Crow-foot grasses also do well, and pea-vines make splendid hay. For summer pasturage the native grasses are used, and for winter pasturage rye—from December 1st to April 1st. The rye pastures are supplemented by cotton-seed meal and pea-vine hay.

While Lee county reports no dairy farms, it had in 1890 2,286 cattle, 136 working oxen, 930 milch-cows and a production of 147,865 gallons of milk and 34,634 pounds of butter. There were 528 horses, 1,327 mules, 6,408 hogs and 26,398 domestic fowls of all varieties, producing 45,808 dozens of eggs. The honey gathered was 5,540 pounds. The sheep numbered 161, with a wool-clip of 280 pounds.

Vegetables, fruits and melons are raised in great abundance for the home market and some for shipping. The amount of truck sold in the county amounts to between \$9,000 and \$10,000. There is a falling off in the melon business, owing to freight and commission rates.

There is some yellow pine still left. Poplar, cypress, hickory, and white oak are found along the streams. The lumber trade and naval stores keep 4 steam sawmills and 2 turpentine distilleries in steady operation. The annual output of these industries is estimated at \$25,000. On tributaries of Flint river are four grist-mills, using 41 horse-powers.

The water of the county is limestone, but the advent of artesian wells has given a better drinking water, and greatly increased the healthfulness of the county.

Leesburg, the county seat, located on the Central of Georgia Railway, between Smithville and Albany, is a town having 413 inhabitants in its corporate limits, and 1,949 in its whole district. It has a court-house valued at \$20,000. The sawmills at this point do a good business.

Smithville, having 597 people in its corporation and 1,954 in the whole district, is at the junction of the Southwestern and the Americus and Albany Railroads, both branches of the Central of Georgia. Here are located two large sawmills, one turpentine distillery, a blacksmith and a wood shop. A large grist-mill, grinding 600 bushels of corn in a day, though just across the line in Sumter, is owned by citizens of Smithville.

Smithville is surrounded by orchards of LeConte and Keiffer pears from which many thousand barrels are shipped in a season.

According to the United States census of 1900 there were ginned in Lee county 8,654 bales of upland cotton during the season of 1899-1900.

The products of this county are marketed in Leesburg and Smithville, and at Americus in Sumter county, and Albany in Dougherty. The receipts of cotton amount to 20,000 bales, of which 2,500 are handled at Leesburg and 3,000 at Smithville.

The Methodists and Baptists are the two leading denominations of the county, in every section of which their churches are found. There are enrolled in the public schools 476 in the 12 white schools, and 1,250 in 23 colored schools.

The area of Lee county is 436 square miles, or 279,040 acres. Population in 1900, 10,344, an increase of 1,270 since 1890; school fund, \$5,948.99.

By the Comptroller-General's report for 1900 there are: acres of improved land, 221,449; of wild land, 3,065; average value to the acre of improved land, \$3.02; of wild land, \$0.85; city property, \$87,564; money, \$33,606; merchandise, \$33,907; stocks and bonds, \$2,246; min-

ing, \$400.00; cotton factories, 32; household and kitchen furniture, \$45,125; farm and other domestic animals, \$119,158; plantation and mechanical tools, \$24,875; watches, jewelry, etc., \$3,517; value of all other property, \$31,159; real estate, \$765,723; personal estate, \$294,483. Aggregate value of whole property, \$1,017,037.

Property returned by colored taxpayers: number of acres of land, 13,335; value, \$43,945; city or town property, \$12,154; money, etc., \$350; watches, silver, etc., \$548; merchandise, \$295; household and kitchen furniture, \$17,068; farm animals, \$43,569; plantation and mechanical tools, \$943.00; value of all other property, \$1,762. Aggregate value of whole property, \$129,121.

The tax returns for 1901 show an increase in the value of all property over the returns of 1900, amounting to \$112,167.

Population of Lee county by sex and color, according to the census of 1900: white males, 770; white females, 737; total white, 1,507; colored males, 4,427; colored females, 4,410; total colored, 8,837.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 23 calves, 18 steers, 63 dairy cows, 41 horses, 6 mules, 147 swine, 11 goats.

LIBERTY COUNTY.

Liberty County was formed from the parishes of St. John, St. Andrew and St. James in 1777. The determination of the inhabitants of St. John's Parish to send delegates to the Continental Congress, before the rest of the Province of Georgia had acquiesced in that measure, induced the legislature, when the county was formed, to call it Liberty. On its north and northeast is the county of Bryan; on the east is the Atlantic ocean, and between St. Catherine's Island are inlets connecting the waters of St. Catherine's and Sapelo Sounds; on the south of one section of it and east of another is McIntosh county; on the south of the main body of it is Wayne county, and on the west and northwest is the county of Tattnall. The Medway river flows along its northeastern border. On the south side of this stream stands what is left of the old town of Sunbury, founded in 1758. Its site is occupied by a few families. The Cannouchee, a branch of the Ogeechee river, separates Liberty from Bryan county on the north. The Altamaha river separates it from Wayne county on the south. Along the eastern mainland are extensive swamps. South Newport river flows along the southern part of that section which lies north of McIntosh county. Between the Medway and South Newport rivers flows North Newport river. Little Cannouchee river and Taylor's creek uniting empty into the Cannouchee river, while Doctor's, Jones and Beard's creeks are tributaries of the Altamaha. Thus, we see, this is a well-watered county. While game is scarce, fish are plentiful. Many persons are engaged in catching fish, crabs and some oysters, both for home consumption and for the market at Savannah.

The soil of the uplands is a light gray with clay subsoil, from one to four feet deep; that of the lowlands a blue clay. With good cultivation these lands yield on an average to the acre: corn, from

10 to 15 bushels; oats, the same; lowland rice from 40 to 50 bushels; Irish potatoes, 40 bushels; sweet potatoes, 200 to 300 bushels; field-peas, 5 to 8 bushels; ground-peas, 20 to 40 bushels; chufas, 25 bushels; sugar-cane syrup, from 250 to 400 gallons; sea-island seed cotton, 600 to 900 pounds; corn fodder, 200 pounds. During the season of 1899-1900, according to the United States census of 1900, there were ginned in this county 30 bales of upland and 420 of sea-island cotton.

The native grasses, Bermuda, crab and crowfoot, grow well, and to those who pay attention to it, make profitable hay crops. The range supplies good pasturage for 10 months of the year. In 1890 Liberty county had 8,055 sheep, with a wool-clip of 17,539 pounds. The cattle numbered 18,654, of which there were 866 working oxen and 4,548 milch-cows. The milk produced was 172,337 gallons and the butter 17,214 pounds. A few farmers have thoroughbred stock. There were 1,318 horses, 285 mules, 3 donkeys, 15,457 hogs, 1,000 goats, and of every variety of poultry 40,987, producing 66,524 dozens of eggs. Another product of the county is 14,583 pounds of honey.

Vegetables of every kind, apples, peaches, grapes and melons, succeed well.

It is estimated that about 50 per cent. of the original forest is still standing. The timbers consist of yellow pine, oak, palmetto, gum, cypress, magnolia, poplar, maple and hickory. The annual output of lumber in superficial feet is about 10,000,000 at from \$12 to \$15 a thousand feet. Of the 15 or 20 sawmills some cut 4,000 and others 10,000 feet a day. The lumber and naval stores are exported to Savannah. There are 12 turpentine stills and 25 grist-mills, some of them making flour.

Hinesville is the county seat, with a court-house valued at about \$10,000.

The county is traversed by three railroads: the Savannah, Florida and Western, of the Plant system; the Florida Central and Peninsular, of the Seaboard Air Line system, and the Darien and Western.

The Methodists, Baptists and Presbyterians have each several churches with a full membership.

Great attention has always been paid to the morals and education of the people of this county. There are many excellent schools belonging in the main to the public school system of Georgia. The average attendance is 741 in 33 white schools, and 807 in 33 colored schools.

The area of Liberty county is 976 square miles, or 624,640 acres. Population in 1900, 13,093, a gain of 206 since 1890; school fund, \$9,224.84.

By the Comptroller-General's report for 1900 there are: acres of improved land, 340,843; of wild land, 188,841; average value per acre of improved land, \$1.50; of wild land, \$0.44; city property, \$46,835; money, etc., \$88,097; value of merchandise, \$55,385; of shipping, \$60; cotton manufactories, \$250; iron works, \$83; mining, \$37; household furniture, \$51,809 farm animals, \$216,942; plantation and mechanical tools, \$33,276; watches, jewelry, etc., \$3,542; value of all other prop-

erty, \$51,736; real estate, \$644,131; personal estate, \$529,003. Aggregate value of whole property, \$639,285.

Property returned by colored taxpayers: number of acres of land, 45,965; value, \$78,094; city property, \$935; money, etc., \$125; merchandise, \$535; household furniture, \$7,358; watches, jewelry, etc., \$154; farm animals, \$45,900; plantation and mechanical tools, \$7,035; value of all other property, \$2,460. Aggregate value of whole property, \$144,136.

The tax returns for 1901 show an increase in the value of all property over the returns of 1900, amounting to \$121,668.

It has already been mentioned that Liberty county sent a delegate, Lyman Hall, to the Continental Congress before Georgia had cast in her lot with the other colonies. This gentleman was afterwards one of the delegates from Georgia who signed the Declaration of Independence.

Early in January, 1779, the British General, Prevost, advancing from Florida, captured Fort Morris at Sunbury after a gallant defense by Colonel John McIntosh who, when summoned to surrender the fort, replied: "Come and take it."

At the White House in the same year Major Baker defeated a party of the British.

Near a place called Hickory Hill, in June, 1779, a detachment of Americans, under Major Cooper and Captain Inman, cut to pieces a party of the British. In another fight during the same month Colonels Baker and Twiggs, of the Georgia militia, defeated a party led by McGirth, the noted Tory chief, near Medway church, and also defeated a reinforcement of British troops, killing their leader, Captain Muller.

No portion of the State suffered more from the Indians than did Liberty county by thieving and murderous raids of the savages from 1787 to 1793.

Population of Liberty county by sex and color, according to the census of 1900: white males, 2,304; white females 2,175; total white, 4,479; colored males, 4,257; colored females, 4,357; total colored, 8,614.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 11 calves, 9 steers, 2 bulls, 9 dairy cows, 43 horses, 52 mules, 37 sheep.

LINCOLN COUNTY.

Lincoln County was laid out from Wilkes in 1796, and named in honor of Major-General Benjamin Lincoln, of Massachusetts, who at one time commanded the American forces in the Department of the South during the fierce struggle for independence.

The Savannah river separates this county from South Carolina; one of its tributaries, the Broad, from Elbert county, and another tributary, called Little river, from Columbia county. Numerous creeks also water the county.

Lincoln county is bounded on the north by Elbert county, on the northeast and east by the State of South Carolina, on the south by Columbia and McDuffie counties, and on the west by Wilkes county.

The county is hilly and has in many places been worn into gullies. On the rivers and creeks the lands are rich and productive. Under a system of terracing and green soiling, the lands are steadily improving in fertility and value, and exhausted soils are again becoming productive. The proximity of its southern section to the city of Augusta renders truck-farming very remunerative. Hence vegetables, fruits, berries and melons are raised in large quantities for that market.

The lands yield to the acre on the average: corn and oats, 15 bushels; wheat and rye, 10 bushels; barley, 25; Irish and sweet potatoes, 100 bushels; field-peas, 10; ground-peas, 25; seed cotton, 700 pounds; crab-grass hay, 3,000 pounds; Bermuda, 5,000; clover, 4,000; corn fodder, stalk and blade, 4,000 pounds; sorghum syrup, 100 gallons; sugar-cane syrup, 125 gallons.

In 1890 there were in Lincoln county 1,317 sheep, with a wool-clip of 2,370 pounds; 2,707 cattle, 118 working oxen, 1,042 milch-cows producing 270,951 gallons of milk and 74,008 pounds of butter; 565 horses, 711 mules, 4,329 hogs and 44,688 of every kind of poultry, with a production of 59,325 dozens of eggs. The product of honey was 6,243 pounds. According to the United States census of 1900 there were ginned in this county 5,132 bales of upland cotton during the season of 1899-1900.

The timber of this county consists of many varieties of oak, hickory, poplar, maple, dogwood and a considerable quantity of pine. A number of lumber mills get this ready for building and other manufacturing purposes.

There are several grist and flour-mills. The county contains many minerals. One gold mine is quite noted.

Lincolnton is the county seat. Other postoffices are Agnes, Amity, Clay Hill, Double Branches, Goshen, Kenna, Leathersville, Leverett, Lisbon and Lockhart.

The schools belong to the excellent public school system of Georgia, and the average attendance is 475 in the 22 white schools, and 377 in the 14 colored.

Methodists, Baptists and Presbyterians are the leading Christian sects.

The area of Lincoln county is 290 square miles, or 185,600 acres. Population in 1900, 7,156, a gain of 1,010 since 1890; school fund, \$4,453.56.

By the Comptroller-General's report for 1900 there are: acres of improved land, 154,707; value per acre, \$2.78; city property, \$14,227; money, etc., \$30,464; cotton manufactories, \$250; merchandise, \$17,005; mining, \$2,500; household furniture, \$30,474; farm animals, \$77,624; plantation and mechanical tools, \$20,126; watches, jewelry, etc., \$1,027; value of all other property, \$12,702; real estate, \$445,023; personal estate, \$194,262. Aggregate value of whole property, \$639,285.

Property returned by colored taxpayers: number of acres, 3,733; value, \$10,372; amount of money, \$350; household furniture, \$5,751; watches, jewelry, etc., \$68; farm animals, \$15,356; plantation and mechanical tools, \$3,297; value of all other property, \$862.00. Aggregate value of whole property, \$36,056.

The tax returns for 1901 show an increase in the value of all property over the returns of 1900, amounting to \$56,353.

Population of Lincoln county by sex and color, according to the census of 1900: white males, 1,492; white females, 1,391; total white, 2,883; colored males, 2,056; colored females, 2,217; total colored, 4,273.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: no return.

LOWNDES COUNTY.

Lowndes County was laid out from Irwin in 1825. A part was taken from it and added to Thomas in 1826. It was named in honor of William Jones Lowndes, who was born in Charleston, South Carolina, in 1781; represented his native State in Congress in 1812, and with the other Southern delegates heartily supported the second war with England and opposed the charter of the United States Bank in 1815.

Lowndes county is bounded on the north by Berrien, on the east by Clinch and Echols, on the south by the State of Florida, and on the west by Brooks county. A little strip of the northern section of the county has Echols on the south.

The Allapaha river flows along a portion of its eastern boundary. Little river separates it from Brooks county on the west to the point where it empties into the Withlacoochee, which from this point forms its western boundary to the Florida line. The county is also watered by creeks tributary to the Allapaha and Withlacoochee rivers. Lowndes county contains numerous open ponds, some covering six square miles, without a tree or stump in them. In these ponds are found beautiful and rare botanical specimens. The rivers, creeks and ponds abound in fish and the woods are full of game.

The face of the country is level. Some of the lands are pine and some hummock. Each of these produces abundant crops of all the staples, as well as vegetables, fruits and berries of every variety, and melons of superior quality. No lands in Georgia produce better than the hummock lands of Lowndes county. Native grasses, crab and crowfoot furnish a great quantity of fine hay, and pea-vine hay is abundantly produced. Broom corn does so well that its cultivation is steadily increasing. The lands under a good system of cultivation give as an average yield to the acre: corn, from 20 to 40 bushels; oats and rye, 20 each; barley, 40; Irish and sweet potatoes, 200 each; field-peas, 25; ground-peas, 40; upland seed cotton, 600 to 1,200 pounds; crab-grass hay, from 4,000 to 6,000 pounds; pea-vine hay, 6,000 to 8,000 pounds; sorghum syrup, 205 gallons; sugar-cane syrup, from 300 to 400 gallons. Some of the best Georgia-made syrup has been from this county. According to the United States census of 1900, there were ginned in this county 114 bales of upland and 7,577 bales of sea-island cotton of the crop of 1899-1900.

There are 3 dairy farms, but these by no means represent all the dairy products of the county. In 1890 the total number of cattle was 12,101, of which 313 were working oxen. There were 3,496 milch-cows, producing 295,562 gallons of milk. The butter made on farms amounted to

38,418 pounds, and the cheese to 557 pounds. The sheep numbered 3,818, with a wool-clip of 7,924 pounds. The county produced 11,801 pounds of honey. All varieties of poultry together numbered 58,603 and produced 85,788 dozens of eggs. There were 833 horses, 1,199 mules and nearly 18,676 hogs.

The lumber business is very large, and 10 or more steam mills are kept busy sawing lumber and shingles. The rosin and turpentine industry is extensive and keeps 15 turpentine distilleries constantly at work.

Valdosta, the county site, is one of the growing cities of South Georgia. It has an electric light plant, an ice factory and pork packing company, an iron foundry, sash and blind factory, buggy and hack factory, industrial variety works, cooperage company, guano works, cotton seed oil-mill, telephone company, and a new cotton factory with 10,000 spindles and a capital of \$175,000. There are also three banks, with an aggregate capital of \$300,000. The population of Valdosta proper is, according to the census of 1900, 5,613, and including the district, 8,532.

The prevailing denominations in this county are Methodists, Baptists and Presbyterians, though others are also represented. Churches are numerous.

The public schools in city and county are excellent. The average attendance in the 34 for whites is 1,050, and in the 27 for colored, 1,200. In the schools of Valdosta there are enrolled 625 white pupils and 453 colored.

Railroad facilities are furnished by the Savannah, Florida and Western of the Plant system; the Georgia Southern and Florida, the Atlantic, Valdosta and Western, and the Valdosta Southern, all meeting at Valdosta. This city handles 7,500 bales of cotton annually.

Troupville, the former county seat, is immediately in the fork made by the confluence of the Withlacoochee and Little rivers. Within a few miles of this place are the ruins of an old town. In front of the ruins are straight rows of large live oaks, so regular in their distances that it is scarcely probable that they are of spontaneous growth. Wide, straight roads are also discernible.

The area of Lowndes county, 455 square miles, or 291,200 acres. Population in 1900, 20,036, a gain of 4,934 since 1890; school fund, \$11,845.95.

By the Comptroller-General's report for 1900 there are: acres of improved land, 326,780; of wild land, 5,487; value per acre of improved land, \$2.55; of wild land, \$0.41; city property, \$1,169,111; shares in bank, \$295,000; gas and electric light companies, \$12,000; building and loan associations, \$15,685; money, etc., \$508,162; merchandise, \$269,975; stocks and bonds, \$95,300; cotton manufactories, \$9,320; iron works, \$5,015; household furniture, \$175,936; farm animals, \$233,726; plantation and mechanical tools, \$52,882; watches, jewelry, etc., \$16,448; value of all other property, \$287,837; real estate, \$2,007,433; personal estate, \$1,985,413. Aggregate value of whole property, \$3,992,846.

Property returned by colored taxpayers: number of acres of land,

21,620; value, \$61,478; city property, \$48,236; money, etc., \$690; merchandise, \$780; household furniture, \$20,127; farm animals, \$1,134; plantation and mechanical tools, \$32,951; value of all other property, \$3,395. Aggregate value of whole property, \$174,824.

The tax returns for 1901 show an increase in the value of all property, over the returns of 1900, amounting to \$421,113.

Population of Lowndes county by sex and color, according to the census of 1900: white males, 4,751; white females, 4,596; total white, 9,347; colored males, 5,425; colored females, 5,264; total colored, 10,689.

Population of the city of Valdosta by sex and color, according to the census of 1900: white males, 1,331; white females, 1,323; total white, 2,654; colored males, 1,419; colored females, 1,540; total colored, 2,959.

Total population of city, 5,613.

Domestic animals in Lowndes county in barns and inclosures, June 1, 1900: 91 calves, 15 steers, 4 bulls, 210 dairy cows, 328 horses, 97 mules, 286 swine, 23 goats.

LUMPKIN COUNTY.

Lumpkin County was laid out from Cherokee and organized in 1832. It was named after the Hon. Wilson Lumpkin. Its boundaries are as follows: Union county on the north and northwest, White on the east, Hall on the southeast, Dawson on the southwest, and Dawson and Fannin on the west.

It is watered by the Etowah, Chestatee and Tesnatee rivers, and the Amicolola, Yellow Shoal, Cain, Yahoola and Town creeks. The Blue Ridge runs from northeast to southwest through the county.

Some fine bodies of lands are on the rivers and creeks. The soil is dark with a clay subsoil, and easily cultivated. Those used for agricultural purposes, under proper cultivation, will produce to the acre: corn, 28 bushels; oats and rye, 18 each; wheat, 15; sweet potatoes, 45; Irish potatoes, 165; field-peas, 15; crab-grass hay, 2,000 pounds; corn fodder, 300 pounds; sorghum syrup, 85 gallons. Only 75 bales of upland cotton were ginned in the county in 1900.

Apples, pears, peaches and quinces grow well. Apples grow on the rich hill-sides and are especially fine.

Some attention is paid to the grasses. But most of the farmers depend on the wild pasturage for 8 months of the year.

In 1890 there were 3,607 sheep in the county, with a wool-clip of 6,205 pounds. There were 3,754 cattle, of which 829 were working oxen, 1,184 cows producing 294,974 gallons of milk, from which were made 70,667 pounds of butter and 110 pounds of cheese. Of all the varieties of domestic fowls the aggregate was 39,453, with a production of 57,651 dozens of eggs. There were 294 horses, 339 mules, 4 donkeys, and 6,138 hogs. The honey product was 14,444 pounds.

Lumpkin county is in the gold belt of Georgia. Many millions of dollars have been taken from its mines. Singleton mines, near Dahlonga, and the Calhoun mine on the Chestatee, have yielded great

quantities of gold. Cain and Yahoola creeks are celebrated localities. The famous lot, 1,052, which in the '30's created such a sensation among the gold speculators, is on Yahoola creek. The vicinity of Dahlonega has for the last half century been the center of the most extensive gold mining operations carried on within the limits of Georgia. Immediately east of Dahlonega is a long line of high ridges and hills extending many miles to the southwest. These ridges and hills form the axis of the gold belt, and are everywhere covered with the prospector's pits, cuts and tunnels. In many instances streams have been turned out of their original channel to wash the alluvial and gravel in their beds for gold. There are 12 gold mills now in operation paying good dividends.

Dahlonega, the county site, with a population of 1,255 in the corporate limits and 1,623 in the entire district, is situated on a high hill, commanding a good view of Walker's, Mossy creek and Yonah Mountains. The name of the town is derived from the Indian word *Tau-la-ne-ca*, meaning yellow money. Here was established a branch of the United States mint. Here is also a branch college of the University of Georgia. In almost every portion of this county gold is found, and the evidence of its existence everywhere meets the eye.

A railroad through the county would prove a great developer.

The area of Lumpkin is 282 miles, or 180,480 acres. Population in 1900, 7,433, a gain of 566 since 1890; school fund, \$4,943.

By the Comptroller-General's report for 1900 there are: acres of improved land, 177,028; of wild land, 32,746; average value to the acre of improved land, \$2.53; of wild land, \$0.51; city property, \$127,200; money, etc., \$121,463; merchandise, \$42,789; shipping and tonnage, \$2,400; household furniture, \$42,758; farm animals, \$69,875; plantation and mechanical tools, \$13,337; watches, jewelry, etc., \$4,210; value of all other property, \$10,356; real estate, \$593,366; personal estate, \$310,100. Aggregate value of whole property, \$903,466.

Property returned by colored taxpayers: number of acres of land, 1,791; value, \$2,505; city property, \$3,225; money, etc., \$42; merchandise, \$125; household furniture, \$996; farm animals, \$2,006; watches, silver, etc., \$26; plantation and mechanical tools, \$212.00; value of all other property, \$95.00. Aggregate value of whole property, \$9,232.

The tax returns for 1901 show a decrease of \$2,337 in the value of all property since 1900.

The schools of the public school system and the branch of the State University are in a prosperous condition. The average attendance is 739 in the 29 schools for whites and 49 in the 3 schools for colored pupils.

The churches of Methodists, Baptists and Presbyterians are scattered throughout the county.

Population of Lumpkin county by sex and color, according to the census of 1900: white males, 3,467; white females, 3,484; total white, 6,951; colored males, 247; colored females, 235; total colored, 482.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 49 calves, 5 steers, 118 dairy cows, 84 horses, 44 mules, 3 sheep, 80 swine, 10 goats.

McDUFFIE COUNTY.

McDuffie County was laid out from the adjoining counties soon after the close of the civil war, and was named in honor of Senator McDuffie, of South Carolina. It is bounded by the following counties: Lincoln and Wilkes on the north, Columbia on the east, Richmond, Jefferson and Warren on the south, and Warren and Wilkes on the west.

Little river, a tributary of the Savannah, runs along its northern and northwestern boundary. Upton creek, running through the county, empties into Little river. Briar creek runs along its southern borders. There are other small streams.

The face of the country is undulating. The lands of the northern section have good clay foundations and are more productive than the gray, sandy soil of the southern part of the county. Some of the lands have been exhausted from bad usage; but in some places the farmers, by a proper system of cultivation and rotation of crops, are bringing them back to their former productiveness.

Taking all the lands, good and bad, the average production to the acre is: corn, 8 bushels; oats, 10; wheat, 9; rye, 12; barley, 10; Irish and sweet potatoes, 150 bushels each; field-peas, 6; ground-peas, 75; seed cotton, 700 pounds; crab-grass hay, 3,000 pounds; corn fodder, 400 pounds; sorghum syrup, 150 gallons; sugar-cane syrup, 150 gallons. Of course the best lands under scientific culture will yield far more than is above stated as the average.

A good deal of attention is paid to vegetables, fruits, berries and melons along the line of the Georgia Railroad. Some of the largest and best flavored watermelons in the State are raised in McDuffie county and sold in the Augusta market.

According to the United States census of 1900 there were ginned in this county 8,635 bales of upland cotton of the crop of 1899-1900.

In 1890 there were in McDuffie county 897 sheep, with a wool-clip of 1,416 pounds of wool; 2,837 cattle, 140 working oxen, 1,073 milch-cows producing 271,028 gallons of milk, from which were made 85,742 pounds of butter and 150 pounds of cheese. There were 653 horses, 790 mules, 1 donkey, 6,088 hogs and 41,031 of all kinds of poultry, whose eggs numbered 56,503 dozens. The honey product of the county was 8,322 pounds.

The timbers are pine and the various hardwoods. Saw and planing-mills cut up considerable quantities of it every year.

There are in McDuffie county three gold mines in successful operation. These are the Talahu, Partu and Williams.

Thomson, the county site, is on the Georgia Railroad not far from the center of the county. It is a growing town of 1,154 inhabitants in the corporate limits, and 3,843 in the entire district, and has good schools and churches.

Dearing and Boneville are also on the Georgia Railroad. Wrightsboro is in the northern part of the county. Every neighborhood has its

school and church. Methodists, Baptists and Presbyterians are the prevailing denominations.

The average attendance of pupils in the county public schools is 605 in the 21 schools for whites, and 843 in the 22 schools for colored.

The area of McDuffie county is 258 square miles, or 165,120 acres. Population in 1900, 9,804, a gain of 1,015 over that of 1890; school fund, \$6,386.92.

By the Comptroller-General's report for 1900 there are: acres of improved land, 144,914; average value per acre, \$3.22; city property, \$144,495; shares in bank, \$19,000; money, etc., \$73,704; merchandise, \$32,222; cotton factories, \$1,122; iron works, \$650; household furniture, \$51,883; farm and other animals, \$91,194; plantation and mechanical tools, \$20,539; watches, jewelry, etc., \$3,272; value of all other property, \$25,806; real estate, \$612,429; personal estate, \$348,590. Aggregate value of whole property, \$961,019.

Property returned by colored taxpayers: number of acres, 4,512; value, \$18,206; city or town property, \$2,530; money, etc., \$41.00; household furniture, \$5,706; farm animals, \$13,925; watches, jewelry, etc., \$53; plantation and mechanical tools, \$3,082; value of all other property, \$446.00. Aggregate value of property, \$38,994.

The tax returns for 1901 show a gain of \$336,920 in the value of all property, as compared with the returns of 1900.

Population of McDuffie county by sex and color, according to the census of 1900: white males, 1,845; white females, 1,816; total white, 3,661; colored males, 3,026; colored females, 3,117; total colored, 6,143.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 7 calves, 58 dairy cows, 54 horses, 4 mules, 2 donkeys, 1 sheep, 110 swine and 2 goats.

McINTOSH COUNTY.

McIntosh County was laid off from Liberty in 1793, and was named to commemorate the services of the McIntosh family. One of these was Lachlan McIntosh, who was born in Scotland and emigrated to Georgia. He was colonel of the first regiment in Georgia, was promoted to general and was placed by Washington in command of an important western post. Colonel John McIntosh, who made the gallant defense of the post at Sunbury, is another member of this distinguished family. Many years after this county was formed, Colonel James S. McIntosh, who was born in the county of Liberty, and who had entered the army in 1812, lost his life in the battle of Molino del Rey, near the city of Mexico.

McIntosh county is bounded on the north by Liberty county, on the east by the Atlantic ocean, on the south by Glynn county, on the southwest by Glynn and Wayne counties, and on the west by Liberty.

South Newport river divides it from Liberty on the north, the Altamaha from Wayne on the southwest and Glynn on the south. The islands of Sapelo, Wolf, Doboy, Hinds, Blackbeard, Broughton, Butner's, Wright's and Patterson's, skirt its coast and are separated from the main-

land and each other by numerous inlets. These islands are favorite resorts for the hunter and fisherman.

The lands along the Altamaha are very rich, producing great quantities of rice and sugar-cane. With good cultivation the lands in McIntosh county will yield to the acre: corn, 15 bushels; oats, 25; Irish potatoes, 150; sweet potatoes, 250; field-peas, 20; ground-peas, 30; sea-island seed cotton, 500 pounds; crab-grass hay, 6,000 pounds; corn fodder, 250 pounds; rice 40 pounds; sugar-cane syrup, 300 gallons.

The splendid grazing adapts this county to sheep and cattle, and the mild winters relieve the farmers almost entirely of the expense of housing and feeding them. In 1890 there were 1,132 sheep, with a wool-clip of 1,691 pounds; 3,613 cattle, 249 working oxen, 1,469 milch-cows producing 76,915 gallons of milk. Only 416 pounds of butter were reported as made in this county in 1890. There were 364 horses, 84 mules, 1 donkey, 4,474 hogs and 7,427 domestic fowls of every kind, producing 15,270 dozens of eggs. The honey produced was 19,332 pounds.

Darien, the county site, is situated on the north bank of the Altamaha river, and is the shipping point for great quantities of shingles and lumber. There is also a big trade at Darien in rosin and turpentine. This city has 1,739 inhabitants, while the district of Darien, which includes the city, contains a population of 3,129.

The Darien and Western Railroad, the Altamaha river and the Atlantic ocean give every facility for transportation. The Florida Central and Peninsular also traverses the western part of the county. During the year 1900 there were received at Darien and shipped from that port 1,000 barrels of rosin.

The area of McIntosh county is 429 square miles, or 274,560 acres. Population in 1900, 6,537, an increase of 67 since 1890; school fund, \$4,639.52.

By the Comptroller-General's report for 1900 there are: acres of improved land, 75,599; of wild land, 112,824; average price per acre of improved land, \$3.19; of wild land, \$0.51; city property, \$155,812; shares in bank, 19,000; money, etc., \$28,513; merchandise, \$52,105; invested in shipping, \$40,000; cotton factories, \$8,600; household furniture, \$32,957; farm animals, \$54,599; plantation and mechanical tools, \$6,255; watches, jewelry, etc., \$3,472; value of all other property, \$40,320; real estate, \$454,796; personal estate, \$288,849. Aggregate value of property, \$961,019.

Property returned by colored taxpayers: number of acres, 13,022; value, \$41,016; city property, \$50,087; merchandise, \$2,430; money, \$2,069; household furniture, \$3,506; farm and other animals, \$17,736; plantation and mechanical tools, \$1,807; value of all other property, \$1,844. Aggregate value of whole property, \$123,151.

The tax returns for 1901 show a decrease of \$4,486 in the value of all property since the returns of 1900.

The people enjoy good school and church privileges. The average at-

tendance is 161 in the 9 schools for whites, and 564 in the 15 for colored pupils.

The products of the county are marketed at Darien, Brunswick and Savannah.

Population of McIntosh county by sex and color, according to the census of 1900: white males, 767; white females, 689; total white, 1,456; colored males, 2,549; colored females, 2,532; total colored, 5,081.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 213 calves, 125 steers, 10 bulls, 222 dairy cows, 162 horses, 83 mules, 25 sheep, 313 swine and 40 goats.

MACON COUNTY.

Macon County was named in honor of Hon. Nathaniel Macon, of North Carolina, who served through the war of the Revolution as a private, refusing promotion; served as a representative in the legislature of his native State; next as a representative in Congress for three terms, part of which time he was Speaker of the House; then a Senator in Congress and president pro tem. of the Senate.

This county is bounded as follows: north by Taylor and Crawford, east by Houston, south by Dooley, Sumter and Schley, and west by Schley and Taylor.

The Flint river flows through the county and has the following tributaries: Beaver, Juniper, Horse, White Water, Buck's, Buck Head and Spring. Considerable quantities of fish are taken from these streams.

The soil is of the tertiary formation, mainly a gray, sandy loam, with "red level" outcrop in the eastern part. The lands, according to location and cultivation, give as an average yield to the acre: corn, 7 to 10 bushels; wheat, 6 to 8; oats, 9 to 10; field-peas, 10; ground-peas, 15; Irish and sweet potatoes, 50 to 75 bushels; seed cotton, 600 pounds; sugar-cane syrup, 100 to 200 gallons; hay, 3,000 pounds. Vegetables of all kinds, berries and melons are plentiful. The amount of truck sold amounts to about \$12,000 a year.

This is the second largest peach-growing county in the State, shipping in one season from Marshallville alone 450 car-loads or 240,000 crates. At this town is the home of Mr. Samuel B. Rumph, the originator of the celebrated Elberta peach. In easy sight of the veranda of his home are 80,000 peach trees. He also raises grapes and makes wine of fine quality. The whole number of peach-trees in the county is 1,500,000. There are also in Macon county 11,330 plum-trees, 9,800 apple-trees and 6,000 pear-trees. Macon county produces also large melons of excellent flavor.

Hay is made to only a small extent. Some farmers have thoroughbred cattle, but the great majority have only the ordinary stock.

In 1890 there were in the county 173 sheep, with a wool-clip of 306 pounds; 3,624 cattle, 176 working oxen, 1,469 milch-cows producing 226,683 gallons of milk, from which were made 51,152 pounds of butter. The eggs from 31,236 poultry of all kinds amounted to 55,473 dozens. The honey produced was 7,563 pounds. There were 572 horses, 1,512 mules, 1 donkey and 11,280 swine.



ORCHARD AND NURSERY.

The timber products are slight, being a little long-leaf pine and some hardwoods, mainly used in making crates and boxes for shipping fruit. Six grist-mills on tributaries of the Flint utilize 132 horse-powers.

The output of all the manufactories of the county is about \$70,000. These are mostly canning and packing factories.

Six grist-mills on tributaries of the Flint river, utilize 132 horse-powers.

Oglethorpe, the county seat, is located on the west side of the Flint river. The court-house is valued at \$20,000.

Montezuma, on the right side of the same river and only a few miles from Oglethorpe, is the largest town. There is abundance of hardwood near the town.

Marshallville, not far from the line which divides Macon and Houston counties, is another prosperous town. At each of these towns is a well-conducted bank. Each of them is located on one of the arms of the Central of Georgia system. No other railroad passes through the county.

There is a high school at each of the above named places, and throughout the county the public school system of Georgia prevails. The average attendance is 754 in 24 schools for whites, and 1,357 in the 28 schools for colored. In the Marshallville high school for whites there are 95 pupils and in the schools of Montezuma are 162 in those for whites, and 245 in those for colored. The Methodists and Baptists are the leading Christian denominations.

Twenty thousand bales of cotton are shipped from this county, 12,000 of which go from Montezuma. According to the census of 1900 there were ginned in this county 16,713 bales of upland cotton of the crop of 1899-1900.

The area of Macon county is 392 square miles, or 250,880 acres. Population in 1900, 14,093, an increase of 910 since 1890; school fund, \$9,482.83.

By the Comptroller-General's report for 1900 there are: acres of improved lands, 211,281; of wild land, 4,200; average value of improved land per acre \$4.01; of wild land, \$1.13; city property, \$340,340; shares in bank, \$1,400; money, etc., \$244,532; merchandise, \$109,445; stocks and bonds, \$10,200; shipping and tonnage, \$2,400; cotton manufactories, \$425; household furniture, \$113,204; farm animals, \$142,689; plantation and mechanical tools, \$34,366; watches, jewelry, etc., \$7,252; value of all other property, \$34,009; real estate, \$1,192,768; personal estate, \$709,029. Aggregate value of whole property, \$1,901,797.

Property returned by colored taxpayers: number of acres, 7,016; value, \$20,856; city property, \$25,151; money, etc., \$875; merchandise, \$1,215; household furniture, \$26,873; farm and other animals, \$2,116; plantation and mechanical tools, \$4,396; value of all other property, \$2,532. Aggregate of whole property, \$107,530.

The tax returns for 1901 show a gain of \$191,862 in the value of all property since 1900.

The population of the districts containing the three largest towns, and of their towns also, is as follows:

Montezuma district 4,643, Montezuma town 903; Marshallville district 2,288, Marshallville town 879; Oglethorpe district 2,174, Oglethorpe town 545.

Population of Macon county by sex and color, according to the census of 1900: white males, 2,123; white females, 2,179; total white, 4,302; colored males, 4,662; colored females; 5,129; total colored, 9,791.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 63 calves, 6 steers, 126 dairy cows, 131 horses, 17 mules, 1 donkey, 256 swine and 2 goats.

MADISON COUNTY.

Madison County was laid out from Oglethorpe, Clarke, Jackson, Franklin and Elbert counties in 1811. Other parts were afterwards added to it as follows: from Clarke in 1813; from Elbert and Franklin in 1819; from Franklin in 1823; from Clarke in 1829; and from Oglethorpe in 1831. It received its name from James Madison, of Virginia, fourth president of the United States, and often styled the "Father of the Constitution."

The county is bounded by the following counties: Franklin and Banks on the north, Hart on the northeast, Elbert on the east, Oglethorpe on the south, Clarke on the southwest and Jackson on the west. The streams are the North and South forks of Broad river, Mill Shoal, Brushy and Holly creeks. The lands along these streams are fertile.

The average production to the acre is: corn, 18 bushels; wheat, 7; rye, 8; oats, 10; Irish potatoes, 40; sweet potatoes, 50; field-peas, 10; ground-peas, 20; seed cotton, upland, 400 to 600 pounds; crab-grass hay, 1,200 to 2,000 pounds; corn fodder, 150 pounds; sorghum syrup, 75 gallons. Tobacco, with proper attention, does well. So do vegetables, fruits, berries and melons. According to the United States census of 1900, there were ginned in Madison county 11,443 bales of upland cotton during the season of 1899-1900.

In 1890 there were 2,085 sheep, with a wool-clip of 2,830 pounds; 5,097 cattle, 349 working oxen, 1,878 milch-cows producing 507,385 gallons of milk and 201,711 pounds of butter; 836 horses, 1,113 mules, 6 donkeys, 8,585 swine, 72,588 domestic fowls of all kinds, producing 77,671 dozens of eggs. This county produced also 16,616 pounds of honey.

The timber growth is some short-leaf pine and the varieties of hard-wood common to that section.

The many natural shoals on the water courses afford ample power for mills and factories.

The Seaboard Air Line Railroad passes through the southern part of the county. A part of the Smithonia, Danielsville and Carnesville Railroad is also completed.

Danielsville, named for General Allen Daniel, and located on a high, uneven ridge, is the county site. The railroad, designed to connect this town with the Seaboard Air Line and Georgia Railroads, is in process of



ARTESIAN WELLS IN MONTEZUMA, GA.

construction. When it is completed the county will have good facilities for trade and travel.

Carlton, Medicus, Comer, Five Forks and Dowdy, are stations on the Seaboard Air Line.

The schools belong to the common school system of the State. The average attendance is 1,255 in the 40 schools for whites and 370 in the 17 schools for colored. Methodists and Baptists are the prevailing denominations of the county, and have good churches.

The area of Madison county is 278 square miles, or 177,920 acres. Population in 1900, 13,224, an increase of 2,200 since 1890; school fund, \$8,834.60.

By the Comptroller-General's report for 1900 there are: acres of improved land, 170,243; value per acre, \$3.64; city property, \$67,655; money, etc., \$123,446; merchandise, \$31,667; stocks and bonds, \$4,200; household furniture, \$67,678; farm and other animals, \$131,521; plantation and mechanical tools, \$35,931; watches, jewelry, etc., \$2,971; value of all other property, \$27,630; real estate, \$687,962; personal estate, \$432,430. Aggregate value of property, \$1,120,392.

Property returned by colored taxpayers: number of acres, 3,214; value, \$9,860; city property, \$775; money, etc., \$53; household furniture, \$4,248; farm animals, \$11,047; watches, etc., \$52; plantation and mechanical tools, \$2,318; value of all other property, \$269.00. Aggregate value of whole property, \$28,622.

The tax returns for 1901 show a decrease of \$8,176 in the value of all property since 1900.

Some gold has been found on Broad river, and iron ore in considerable quantities; also a good article of granite and quartz.

Population of Madison county by sex and color, according to the census of 1900: white males, 4,696; white females, 4,643; total white, 9,339; colored males, 1,945; colored females, 1,940; total colored, 3,885.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 53 calves, 8 steers, 3 bulls, 82 dairy cows, 74 horses, 9 mules, and 156 swine.

MARION COUNTY.

Marion County was laid out from Muscogee and Lee in 1827. Part of it was given to Crawford in 1827 and part returned to Muscogee in 1829. It was named for General Francis Marion, of South Carolina, who, because of his rendezvous in the swamps of the Pedee, from which he sallied forth to his sudden attacks upon the British, received the title of "Swamp Fox."

The counties bounding it are: Talbot on the north, Taylor, Schley and Sumter on the east, Webster on the south and southwest, and Chattahoochee and Muscogee on the west.

There are no rivers in this county, but some large creeks, as Juniper and Pine Knot, tributaries of the Chattahoochee, Muckalee and Kinchafoonee, branches of the Flint.

The soil is cretaceous, tertiary in the southern portion. The land is a gray, sandy loam; but, like most cretaceous soils, productive. The southern part of the county was originally the best, but the lands have been injured by injudicious cultivation. With scientific farming these lands can be restored to their original fertility. Under proper cultivation there is no better farming land in Georgia. The pine belt of the county is now attracting attention, and is being settled up very rapidly. Lands in the pine belt sell for \$1 an acre; in the middle and lower section, on an average of \$5.00 an acre. Cow-peas, sown after stubble, give fine hay. Some of the farmers who prepare their stubble get in good seasons an excellent yield of crab and crowfoot-grass hay.

According to location and culture the lands average to the acre: corn, 7 to 10 bushels; oats, 8 to 25; wheat, 5 to 18; rye, 3 to 10; Irish potatoes, 50 to 110; sweet potatoes, 50 to 150; field-peas, 15; ground-peas, 25; upland seed cotton, 300 to 600 pounds; crab-grass hay, 2,000 pounds; corn fodder, 450 pounds; sorghum syrup, 50 gallons; sugar-cane syrup, 150 gallons. Vegetables, berries, fruits and melons are raised, but almost entirely for home use. The total truck sold will amount to about \$4,000. According to the United States census of 1900 there were ginned in this county 9,681 bales of upland cotton of the crop of 1899-1900.

In 1890 there were 73 sheep, with a wool-clip of 195 pounds; 2,775 cattle, 149 working oxen, 889 milch-cows producing 149,962 gallons of milk, and 42,319 pounds of butter. There were also 455 horses, 832 mules, 6,118 hogs, 25,355 domestic fowls of all kinds producing 34,072 dozens of eggs. The honey gathered amounted to 7,833 pounds.

The timber products are not extensive, but there is a little long-leaf pine, and some good hardwoods are still uncut along the creeks. There are two saw-mills operated by steam, and at Blueville there is one operated by water. The annual output of timber amounts to \$4,000.

On the streams are two flour-mills and ten grist-mills. About 165 water-powers are used. There are also two grist-mills operated by steam.

There is a coffin factory at Juniper, just inside the county, and a short distance from Juniper Station on a branch of the Central Railroad in Talbot county.

Buena Vista, the county seat, named for one of the famous battles of the Mexican war, is a pleasant and prosperous town of 1,161 people, located on an arm of the Central Railroad. The entire Buena Vista district has 2,725 inhabitants. This town has one bank with a capital of \$38,000, and several good mercantile establishments. There are small stores in every part of the county. There is in the neighborhood a white kind of chalk. There are some remarkable Indian mounds on a plantation formerly owned by Colonel Wm. M. Brown.

Methodists and Baptists are the strongest Christian denominations in the county, and there are also many Presbyterians and Episcopalians.

The schools of the town and county belong to the public school system of Georgia. The average attendance is 698 in the 28 schools for whites, and 749 in the 22 schools for colored.

The receipts of cotton from the entire county are about 10,000 bales, which are shipped from Buena Vista.

The area of Marion county is 344 square miles, or 220,160 acres.

Population in 1900, 10,080, an increase of 2,352 since 1890; school fund, \$6,157.12.

By the Comptroller-General's report for 1900 there are: acres of improved land, 216,755; of wild land, 13,056; average value per acre of improved land, \$2.58; of wild land, \$0.27; city property, \$102,020; shares in bank, \$30,000; money, etc., \$57,839; merchandise, \$34,641; stocks and bonds, no report; household furniture, \$65,855; farm animals, \$115,316; plantation and mechanical tools, \$21,341; watches, jewelry, etc., \$2,878; value of all other property, \$14,518; real estate, \$666,644; personal estate, \$356,367; aggregate value of whole property, \$1,023,011.

Property returned by colored taxpayers: Number of acres, 4,301; value, \$9,120; city property, \$12,235; money, \$125; household furniture, \$4,248; farm animals, \$11,047; watches, etc., \$52; plantation and mechanical tools, \$2,318; value of all other property, \$376. Aggregate value of property, \$46,525.

The tax returns for 1901 show an increase of \$139,845 in the value of all property since the returns of 1900.

Population of Marion county by sex and color, according to the census of 1900: white males, 2,142; white females, 2,089; total white, 4,231; colored males, 2,865; colored females, 2,984; total colored, 5,849.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 24 calves, 1 bull, 64 dairy cows, 34 horses, 8 mules, 143 swine, 13 goats.

MERIWETHER COUNTY.

Meriwether County was laid out from Troup, and organized December, 1827. It was named in honor of General David Meriwether, who came from Virginia and settled in Wilkes county in 1785. It is bounded by the following counties: Coweta on the north, Spalding, Pike and Upson on the east, Talbot and Harris on the south, and Troup on the west.

Line creek forms its eastern boundary for a few miles, and empties into the Flint river, which flows along the balance of its eastern border. Other streams are Red Oak, White Oak, Pigeon, Cane, Walnut and Bear creeks. The surface of the country is undulating. The Pine Mountains rise in this county west of the Flint river and afford much picturesque scenery.

The soil is metamorphic, with undulating red lands, interspersed with gray, gravelly strips, both with red clay subsoil. The water is pure free-stone.

The lands will average to the acre: corn, 11 to 15 bushels; oats, 10 to 20; wheat, 6 to 8; rye, 10 to 25; Irish potatoes, 75; sweet potatoes, 100; field-peas, 10; ground-peas, 25; seed cotton, 600 to 750 pounds; crab-

grass hay, 5,000 pounds; sorghum syrup, 75 gallons; sugar-cane syrup, 250 gallons.

The figures for the yield of the various crops represent the average production of all lands, rich and poor, under ordinary cultivation; but the better lands under improved methods yield 1,500 pounds of seed cotton to the acre, 28 bushels of wheat, and other crops in proportion.

Vegetables in great quantities, berries, fruits and melons are raised, mostly for home use. Some of these products are marketed and bring about \$9,000 per annum.

Considerable hay is raised by some farmers. The number of pure bred cattle recorded is considerably above the average.

In 1890 there were 610 sheep, with a wool-clip of 1,307 pounds; 6,454 cattle, 278 working oxen, 2,720 milch-cows giving 690,401 gallons of milk, from which were made 219,798 pounds of butter. There were 1,021 horses, 2,640 mules, 10,476 hogs and 91,967 poultry, whose eggs amounted to 157,334 dozens. The product of honey was 30,928 pounds.

In the orchards there are 65,873 peach trees, 7,000 apple trees and 1,200 plum trees.

The timber products consist of considerable hardwoods on the water courses. The output is small, about \$6,000.

The water powers of the county are fine. On the Flint river and its tributaries are 12 grist-mills, using 223 horse-powers. On a tributary of the Chattahoochee is one mill using 11 horse-powers. On the Flint river there are utilized 4,255 horse-powers, which are, however, partly in Pike county. The 18 manufactories of the county have an output valued at \$40,741.

The mineral products are gold, iron, asbestos and granite. The gold mines, with primitive methods, have yielded handsomely for forty years. Under recent development, the result of northern capital, the mines have equalled if not surpassed any in the State. At Chalybeate Springs iron ore is found in great quantities, which, when analyzed, is found to equal the ores of Birmingham. Only capital is needed for their development. The recently discovered asbestos deposits are found to be very rich in their yield and easily worked. Meriwether granite is pronounced equal to that of the famous Quincy granite of Massachusetts and is susceptible of very fine polish. The elegant church of St. Luke, in Columbus, Georgia, used this granite exclusively in all the granite work and granite columns employed in its construction. Immense quantities have been shipped to Savannah and other Atlantic ports.

The county is famous for its mineral springs. The Chalybeate, in the eastern part of the county, is as strongly impregnated with iron as any of the Spas of the world. The Warm Springs, six miles west of the Chalybeate, afford the most delightful baths in all the South or the Union. The temperature of the water is 92 degrees and the swimming pool is most luxurious in its equipments and delights. The waters, forming an immense stream, gush from a spur of the Pine Mountain and the great hotel on the hill makes this one of the coolest summer resorts in

the State. One mile east of Warm Springs is the Cold Spring. Here the United States fish commission has established a hatchery a few hundred yards below the bold spring, which furnishes many thousand gallons of water per minute.

Six miles west of Warm Springs are the White Sulphur Springs, another popular summer resort. The water is very strongly impregnated with sulphur, its analysis being the same as the Indian Spring in Butts county.

The climate is delightful, the mean temperature being 63 degrees. The extremes in temperature range from 20 to 98 degrees, these points being rarely ever reached.

The county enjoys limited railroad facilities, but with those promised a period of rich development may be anticipated, its mineral wealth and other resources having then a rare chance of securing outside investment.

According to the United States census of 1900 there were ginned in Meriwether county 22,452 bales of upland cotton of the crop of 1899-1900.

Greenville, named in honor of General Nathaniel Greene, is the county site. It is located on a high ridge near the center of the county, on a branch of the Central of Georgia Railway. A company has been formed to erect here a new cotton factory. The Methodists and Baptists have churches and academies for male and female. Greenville has one bank with a paid-up capital of \$25,000. Its population is 815 in the corporate limits, and including the district of the same name it is 2,630.

The county has good schools and churches of every denomination. The average attendance on the schools is 1,699 in the 52 for white pupils, and 1,604 in the 38 schools for colored pupils.

Woodbury, ten miles south of Greenville, where the Macon and Birmingham Railroad crosses the Central, is a growing town. At Flat Shoals, twelve miles from Greenville on the Flint river, are some of the finest water powers in the State. Lutherville, Oakland, Gay, Raleigh, Bullochville, Stinson, Odessa, St. Mark's, Oak Ridge and Rocky Mount are flourishing business centers.

The area of Meriwether county is 544 square miles, or 348,160 acres.

Population in 1900, 23,339, a gain of 2,599 since 1890; school fund, \$22,427.16.

By the Comptroller-General's report for 1900 there are: acres of improved land, 295,396; of wild land, 6,306; average value per acre of improved land, \$3.75; of wild land, \$0.40; city property, \$167,413; money, etc., \$109,425; value of merchandise, \$68,080; shares in bank, \$25,000; bank stock and bonds, \$38,500; household furniture, \$87,114; farm animals, \$174,763; plantation and mechanical tools, \$43,690; watches, jewelry, etc., \$4,197; value of all other property, \$37,976; real estate, \$1,277,774; personal estate, \$594,560; aggregate value of property, \$1,872,334.

Property returned by colored taxpayers: Number of acres, 5,413; value, \$20,258; city property, \$4,362; household furniture, \$14,834;

watches, etc., \$110; farm animals, \$23,648; plantation and mechanical tools, \$4,427; value of all other property, \$490; aggregate value of property, \$69,169.

The tax returns for 1901 show an increase of \$90,589 in the value of all property since 1900.

Population of Meriwether county by sex and color, according to the census of 1900: white males, 4,715; white females, 4,807; total white, 9,522; colored males, 6,858; colored females, 6,959; total colored, 13,817.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 32 calves, 10 steers, 12 bulls, 86 dairy cows, 78 horses, 13 mules, 205 swine, 6 goats.

MILLER COUNTY.

Miller County was formed in 1856 from Early and Baker, and was named in honor of Andrew J. Miller, who had frequently served in the State legislature, and as President of the Senate had been noted for his ability and the fairness with which he treated each party.

Miller is bounded by the following counties: Baker and Early on the north, Baker on the east, Decatur on the south and Early on the west.

Spring creek, running from north to south through the center of the county, is the principal stream. It abounds in fish of the varieties generally found in Georgia streams. This creek has tributary creeks from the east and west.

Almost the entire surface of the county is level. The soil is light with a heavy growth of pine timber.

The lands yield to the acre: corn, 15 bushels; oats, 10; sweet potatoes, 150; ground-peas, 15; seed cotton, 800 pounds; sugar-cane syrup, 250 gallons. Vegetables and melons do well.

The fine pasturage afforded by the native grasses causes the farmers to pay no attention to hay. Their stock seem to take care of themselves entirely.

By the census of 1890 there were in this county 5,804 sheep, with a wool-clip of 12,963 pounds; 8,776 cattle, 330 working oxen, 3,005 milch-cows, but a production of only 144,730 gallons of milk and 1,770 pounds of butter. There were also 727 horses, 311 mules, 2 donkeys, 12,938 swine and 24,583 of all kinds of domestic fowls. The production of eggs was 50,028 dozens and of honey 820 pounds.

Rosin, turpentine and lumber are the chief articles of trade.

According to the United States census of 1900 there were ginned in this county 2,025 bales of upland and 50 of sea-island cotton during the season of 1899-1900.

Colquitt is the county site. It is on the Georgia Pine Railway which connects Bainbridge, in Decatur county, on the Savannah, Florida and Western of the Plant System with Arlington, in Calhoun county, on one of the arms of the Central of Georgia system.

In the towns and county are churches of the leading Christian denominations. Methodists and Baptists predominate.

Other postoffices are Bait, Horn's Cross Roads, Mayhaw, Pond Town, Spooner and Twilight.

The schools of the county belong to the public school system of Georgia and are in good condition. The average attendance is 510 in the 23 schools for white pupils, and 195 in the 11 schools for negroes.

The area of Miller county is 275 square miles, or 176,000 acres.

Population in 1900, 6,319, an increase of 2,044 since 1890; school fund, \$3,976.11.

By the Comptroller-General's report for 1900 there are: acres of improved land, 145,875; of wild land, 28,307; average value per acre of improved land, \$2.25; of wild land, \$1.97; city property, \$31,480; money, etc., \$81,693; value of merchandise, \$31,870; stocks and bonds, \$500; household furniture, \$42,441; farm and other animals, \$113,569; plantation and mechanical tools, \$20,346; watches, jewelry, etc., \$1,056; value of all other property, \$67,043; real estate, \$516,279; personal estate, \$351,697; aggregate value of property, \$777,976.

Returns of property by colored taxpayers: Number of acres, 4,962; value, \$10,239; city property, \$330; money, etc., \$142; household furniture, \$4,982; watches, etc., \$37; farm and other animals, \$912; plantation and mechanical tools, \$1,688; value of all other property, \$570; aggregate value of property, \$27,100.

The tax returns of 1901 show a gain in the value of all property over the returns of 1900 amounting to \$61,935.

Population of Miller county by sex and color, according to the census of 1900: white males, 1,837; white females, 1,774; total white, 3,611; colored males, 1,436; colored females, 1,272; total colored, 2,708.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 56 calves, 36 steers, 14 bulls, 92 dairy cows, 47 horses, 111 mules, 3,100 sheep, 660 swine.

MILTON COUNTY.

Milton County was formed in 1857 from Cherokee, Forsyth and Cobb, and was named in honor of Colonel John Milton, Secretary of State for Georgia in 1789. It is bounded by the following counties: Cherokee on the north, Forsyth on the east and north, Gwinnett on the southeast and south, DeKalb and Fulton on the south, Cobb on the west and Cherokee on the west and northwest.

The Chattahoochee river flows along its entire southern boundary. Creeks tributary to the Etowah and the Chattahoochee flow through the county. The lands along the streams are productive. The people are blessed with abundance of good water and a healthy climate.

The lands give as an average yield to the acre: corn, 15 bushels; wheat and oats, 10 bushels each; rye and barley, 8 bushels each; Irish and sweet potatoes, 100 bushels each; field-peas, 15 bushels; ground-peas, 50 bushels; seed cotton, 650 pounds; crab-grass hay, 4,000 pounds; clover hay, 6,000; corn fodder 400 pounds; sorghum syrup, 100 gallons. It is a good county for hay.

In 1890 there were 394 sheep, with a wool-clip of 677 pounds; 3,329 cattle, 165 working oxen, 1,270 milch-cows giving 386,522 gallons of milk, from which are made 138,112 pounds of butter. There were 381 horses, 778 mules, 2 donkeys, 3,826 hogs and 63,113 domestic fowls of every kind, producing 81,372 dozens of eggs. There is one butter and cheese factory. The honey production was 13,925 pounds in 1890.

There is no railway passing through the county, but the Southern Railway runs close to the boundary line.

For building purposes there is abundance of timber and stone.

According to the United States census of 1900 there were ginned in this county 6,407 bales of upland cotton of the crop of 1899-1900.

Alpharetta is the county site. The entire Alpharetta district contains 1,529 inhabitants, 310 of whom live in the town. Other postoffices are Arnold, Coker, Dinsmore, Field's Cross Roads, Freemansville, McClure, Mazeppa, Ocee, Skelton, Stono, Warsaw and Webb.

Methodists and Baptists are the dominant religious sects. Their churches are found in every part of the county.

The schools belong to the public school system of Georgia, and the average attendance is 914 in the 30 schools for white pupils, and 83 in the 4 schools for colored pupils.

The area of Milton county is 147 square miles, or 94,080 acres.

Population in 1900, 6,763, an increase of 555 since 1890; school fund, \$4,791.28.

By the Comptroller-General's report for 1900 there are: acres of improved land, 81,344; of wild land, 590; average value of improved land to the acre, \$6.22; of wild land, \$2.25; city property, \$25,620; money, etc., \$81,413; merchandise, \$23,565; stocks and bonds, \$17,500; household furniture, \$44,456; farm animals, \$95,715; plantation and mechanical tools, \$26,419; watches and jewelry, \$1,568; value of all other property, \$16,794; real estate, \$532,965; personal estate, \$315,783; aggregate value of property, \$848,748.

Property returned by colored taxpayers: Acres of land, 396; value, \$1,020; city property, \$375; money, etc., \$92; household furniture, \$1,332; watches, etc., \$40; farm animals, \$2,240; plantation and mechanical tools, \$457; value of all other property, \$102; aggregate value of property, \$5,560.

The tax returns for 1901 show an increase in the value of all property since the returns of 1900 amounting to \$7,710.

Population of Milton county by sex and color, according to the census of 1900: white males, 3,088; white females, 2,912; total white, 6,000; colored males, 377; colored females, 386; total colored, 763.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 17 calves, 2 steers, 46 dairy cows, 36 horses, 17 mules, 70 sheep.

MITCHELL COUNTY.

Mitchell County was laid out from Baker in 1857, and was named for Hon. David B. Mitchell, who was Governor of Georgia from November 9, 1809, to November 9, 1813, and again from November 9, 1815, to March 4, 1817, when he resigned. The following counties bound it: Dougherty on the north, Worth and Colquitt on the east, Thomas and Decatur on the south, Baker on the west and northwest. Flint river runs along its whole western boundary. Turkey, Walden's and Tom's creeks, branches of the Ocklockonee river, water the eastern side of the county. Other streams are Lost and Big creeks. In the southern part is a pond or lake about 10 miles long; near the center is another not quite so large.

A branch of the Savannah, Florida and Western Railway of the Plant System runs through the county, connecting Camilla with two growing cities, Albany on the north and Thomasville on the south.

The pine lands of this county are very productive, those of some sections being more fertile, of course, than those of others. According to location and cultivation they will produce to the acre: corn, 15 bushels; oats, 12 to 25 bushels; rice, 25 bushels; Irish potatoes, 75 bushels; sweet potatoes, 150 bushels; field-peas, 15 bushels; ground-peas, 30 bushels; seed cotton, from 500 to 1,000 pounds; corn fodder, 450 pounds; sugar-cane syrup, 200 to 250 gallons.

Very little attention is paid to grasses, because the wild grasses afford such abundant pasturage. Bermuda does fairly well. Crab-grass grows luxuriantly, as do peavines and beggar weed.

There are 4 dairy farms. On them the Jersey cow is the favorite. Very little attention is paid to the breeding of beef cattle.

By the census of 1890 there were in Mitchell county 1,563 sheep, with a wool-clip of 5,322 pounds, 11,588 cattle, 370 working oxen, 3,718 milch-cows yielding 277,573 gallons of milk, from which were made 52,097 pounds of butter and 125 pounds of cheese. There were at the same time, 1,102 horses, 1,126 mules, 3 donkeys, 13,971 hogs and 49,182 domestic fowls of all kinds producing 60,826 dozens of eggs. The production of honey was about 803 pounds.

Peaches, grapes and watermelons are marketed in large cities east and west. The value of these products last year was about \$20,000. The melon business last year was almost abandoned on account of high freights. A few years ago 1,500 carloads were shipped, last year only 100.

There are in the county 3 vineyards, covering in all 200 acres. About 50 per cent. of the grapes are sold in the markets, and from 30 per cent. of them wine is made. The latter is for domestic use, for none was sold in the markets.

About 20 per cent. of the forest area has standing timber suitable for the market. About the same percentage in the turpentine belt is dying from boxing. Smaller trees are not affected. The annual output of lumber in superficial feet is about 18,000,000 at \$8 a thousand feet.

About 13 steam sawmills and 20 turpentine stills are kept actively employed.

At Camilla are the works of the Mitchell County Fertilizer Company; at Pelham are the Pelham Guano Works, the Pelham Cotton Seed Oil-Mill and the Pelham Manufacturing Company. The latter is a cotton-mill with 5,000 spindles, 160 looms and a capital stock of \$100,000. It will employ 100 hands. The annual consumption will be 3,000 bales, and the value of the output \$180,000. The cotton seed oil-mill is valued at \$30,000, and its annual output at \$50,000.

Camilla and Pelham are each on the Savannah, Florida and Western Railway, and in these two towns the products of the county are chiefly marketed. The cotton receipts and shipments of the entire county are about 10,000 bales of upland and 2,500 bales of sea-island cotton, of which about 6,000 bales of upland and 2,000 of sea-island cotton are handled at Pelham. Some of the products of the western part of the county are shipped by steamboats on the Flint river. According to the United States census of 1900 there were ginned in this county 7,863 bales of upland cotton and 2,180 bales of sea-island cotton of the crop of 1899-1900.

At Camilla, the county seat, is a bank with a capital of \$25,000. The court-house is estimated at \$30,000. There are in the county 12 grist-mills and 1 small flour-mill at Pelham. All except 2 or 3 grist-mills are operated by steam.

Other postoffices are Apex, Baconton, Dewitt, Faircloth, Flint, Magnolia, Raiford, Stubbs and Tuton.

The district including Camilla has 4,668 inhabitants, while the population of Camilla is 1,051. The Pelham district has 2,836 inhabitants, of which 945 are in the town of Pelham.

The schools belong to the public school system of Georgia. Every neighborhood of the county has its school and church. Methodists and Baptists are the leading denominations, but there are also Episcopalians, Presbyterians, Roman Catholics and others.

The area of Mitchell county is 542 square miles, or 346,880 acres.

Population in 1900, 14,767, a gain of 3,861 since 1890; school fund, \$10,677.40.

By the Comptroller-General's report for 1900 there are: acres of improved land, 291,481; of wild land, 25,123; average value per acre of improved land, \$3.05; of wild land, \$1.88; city property, \$207,441; shares in bank, \$7,000; money, etc., \$264,509; value of merchandise, \$75,232; stocks and bonds, \$17,075; cotton manufactories, \$102,000; household furniture, \$108,176; farm and other animals, \$257,923; plantation and mechanical tools, \$48,761; watches, jewelry, etc., \$8,844; value of all other property, \$43,548; real estate, \$1,145,613; personal estate, \$941,802; aggregate value of property, \$2,087,415.

Property returned by colored taxpayers: Number of acres of land, 17,264; value, \$50,033; city property, \$8,619; money, etc., \$210; merchandise, \$230; household furniture, \$16,713; watches, etc., \$433; farm-

and other animals, \$35,411; plantation and mechanical tools, \$7,291; value of all other property, \$3,018; aggregate value of property, \$122,078.

The tax returns for 1901 show an increase of \$255,119 in the value of all property in the county since 1900.

The average attendance on the public schools of Mitchell county is 1,138 in the 41 schools for white, and 932 in the 30 for negroes.

Population of Mitchell county by sex and color, according to the census of 1900: white males, 3,442; white females, 3,336; total white, 6,778; colored males, 4,011; colored females, 3,987; total colored, 7,999.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 32 horses, 1 mule, 943 sheep, 15 swine.

MONROE COUNTY.

Monroe County was laid out by the lottery act of 1821, and a part set off to Butts in 1825. It was named after James Monroe, of Virginia, the fifth President of the United States. It is bounded by the following counties: Butts on the north, Jasper and Jones on the east, Bibb on the southeast, Crawford on the south, Upson and Pike on the west. Spalding also touches the western border for a mile or more in the extreme northwest. The Ocmulgee river forms its eastern boundary. There are also several creeks: Tobesofkee, Echeconnee, Phillipi, Beaverdam, Deer, Rum, Cook's, Walker, Eight Mile, Beach, Shoal and Crooked. The Towaliga river, or creek as it is sometimes called, running across the northern section, empties into the Ocmulgee river. The soil on the numerous water courses is of a dark chocolate color, well adapted to the production of corn, wheat and oats, while the mulatto and gray lands are best for all the small grains and grasses, and for all varieties of vegetables. Peaches, apples, melons and all kinds of berries do well. The products of the county find a ready market in Forsyth and Macon.

The lands of Monroe county, under a good system of culture, will yield by the acre: corn, rye and barley, 20 bushels each; wheat, 10 to 40 bushels; oats, 25 bushels; Irish potatoes, 50 to 100 bushels; sweet potatoes, 100 to 250 bushels; field-peas, 15 bushels; ground-peas, 30 bushels; seed cotton, 800 pounds; crab-grass hay, 3,000 pounds; corn fodder, 600 pounds; sorghum syrup, 100 gallons; sugar-cane syrup, 150 gallons. According to the United States census of 1900 there were ginned in this county 18,724 bales of upland cotton during the season of 1899-1900.

There is considerable improvement from year to year in the breeds of stock, and in the attention given to the care of milch-cows. In 1890 there were in Monroe county 341 sheep, with a wool clip of 647 pounds; 5,538 cattle, 194 working oxen, 2,389 milch-cows producing 655,541 gallons of milk, from which 194,827 pounds of butter and 246 pounds of cheese were made. There were also 84,348 domestic fowls of all kinds, producing 137,109 dozens of eggs. The honey produced was 24,887 pounds. There were 1,164 horses, 2,705 mules, 1 donkey and 11,699 hogs.

A traveler on the Central Railroad, viewing the beautiful town of Forsyth and its immediate vicinity, receives the impression that this is a progressive county. In fact all the large towns on the railroad from Macon to Atlanta make the same favorable impression.

Both the Ocmulgee and Towaliga have water falls with fine locations for factories and mills.

At Forsyth, the county site, a town of 1,172 inhabitants, is the cotton mill of the Forsyth Manufacturing Company with 6,000 spindles and a home capital of \$50,000. It is operated by steam. A company has been organized to build another factory. There is also at this town a cotton seed oil-mill and guano factory. Forsyth has two banks, with an aggregate capital of \$130,000. The district of Forsyth, which includes the town, contains 2,429 inhabitants.

At Glover's, near Juliette, is a grist mill, and near by a cotton factory.

There are excellent schools at Forsyth. On the right of the railroad going toward Atlanta are the handsome buildings of the Monroe Female College, the property of the Baptists of Georgia. The Methodists also have a good school at this point. This is a town of good schools and pretty church edifices.

Methodists, Baptists and Presbyterians are the leading denominations of the county. Every neighborhood has its school and a church of one or more of these denominations.

In the public schools the enrollment is 1,648 in the 40 schools for white pupils and 3,326 in the 41 for colored.

The area of Monroe county is 480 square miles, or 307,200 acres.

Population in 1900, 20,682, a gain of 1,545 since 1890; school fund, \$13,942.40.

By the Comptroller-General's report for 1900 there are: acres of improved land, 294,557; average value per acre, \$4.30; city property, \$269,754; shares in bank, \$47,800; money, etc., \$160,487; merchandise, \$100,525; stocks and bonds, \$600; cotton factories, \$80,500; mining, \$100; household furniture, \$128,105; farm and other animals, \$179,883; plantation and mechanical tools, \$52,327; watches, jewelry, etc., \$8,003; value of all other property, \$57,499; real estate, \$1,537,817; personal estate, \$851,068; aggregate value of property, \$2,388,885.

Property returned by colored taxpayers: Number of acres, 12,408; value, \$62,580; city property, \$10,532; money, etc., \$65; merchandise, \$310; household furniture, \$22,859; watches, etc., \$192; farm and other animals, \$36,325; plantation and mechanical tools, \$10,833; value of all other property, \$57,499; aggregate value of property, \$150,726.

The tax returns for 1901 show an increase of \$103,910 in the value of all property since the returns of 1900.

Population of Monroe county by sex and color, according to the census of 1900: white males, 3,372; white females, 3,445; total whites, 6,817; colored males, 6,717; colored females, 7,148; total colored, 13,865.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 26 calves, 11 steers, 1 bull, 124 dairy cows, 105 horses, 18 mules, 196 swine, 5 goats.

MONTGOMERY COUNTY.

Montgomery County was laid out from Washington in 1793, and named in honor of General Richard Montgomery, who on the 31st of December, 1775, at the head of troops from New York and New England, was killed in an attack upon the fortifications of Quebec. Part of the county was set off to Tattnall in 1801. In 1811, while a part was added to Laurens, other parts were taken from Telfair and Tattnall. In 1812 a part was set off to Emanuel. A part was added to it from Tattnall in 1814. A part was added to it from Telfair in 1820, and another part in 1833. Thus it is seen that the boundaries of Montgomery county have undergone many changes.

It is bounded by the following counties: Emanuel on the northeast, Tattnall on the southeast, Appling on the south, Telfair on the southwest, Dodge on the west, and Laurens on the northwest and west.

The Oconee river flows through the center of the county. The Little Ocmulgee flowing along its southwestern boundary empties into the Ocmulgee, which continues along the southern border until it unites with the Oconee to form the Altamaha river. This latter stream continues a few miles more on the southern border. There are also many creeks, Lott's, Limestone, Flat, Cypress, Red Bluff, Alligator, Tiger, Little, Okewalkee, Pendleton and Swift.

The soil is a sandy loam, and under proper tillage will yield to the acre: corn, 15 bushels; oats, 20 bushels; Irish and sweet potatoes, 100 bushels each; field-peas, 10 bushels; ground-peas, 30 bushels; seed cotton, 500 to 800 pounds; corn fodder, 300 pounds; rice, 10 bushels; sugar-cane syrup, 250 gallons. Good hay can be made, but the wild grasses afford such excellent pasturage that little attention is paid to it.

In 1890 the county had 11,479 sheep, from which 29,185 pounds of wool were clipped. The cattle numbered 13,195, of which 3,806 were milch-cows, giving 280,282 gallons of milk, from which were made 46,304 pounds of butter; 38,055 domestic fowls of every kind gave 47,529 dozens of eggs. There were 668 horses, 615 mules and 17,340 hogs. The honey produced was 2,106 pounds. There were in the county 575 working oxen.

The usual vegetables, fruits, berries, grapes and melons are raised, but only for home consumption.

A large per cent. of the original forest is still standing. It consists of long-leaf pine, cypress, oak, hickory and ash. The annual output of lumber in superficial feet is 150,000,000, at an average price of \$7 a thousand feet. This keeps in active operation 50 sawmills, and 12 turpentine distilleries prepare naval stores for the market.

The Oconee river furnishes water transportation and the Georgia and Alabama Railroad, of the Seaboard Air Line system, affords transportation and travel by land.

Fifty grist-mills supply the needs of the citizens and the hands employed in the numerous lumber mills.

Mount Vernon, on the Georgia and Alabama Railroad, is the county site. There are about 25 other postoffices.

Methodists, Baptists and Presbyterians have many churches and a large membership.

The schools are in good condition and belong to the public school system of the State. The average attendance is 1,305 in the 56 schools for whites, and 811 in the 28 for colored.

The products of the county are marketed in Savannah.

Five thousand bales of cotton are shipped from this county; 500 from Mount Vernon. According to the United States census of 1900 there were ginned in this county 4,858 bales of upland and 534 bales of sea-island cotton during the season of 1899-1900.

The area of Montgomery county is 744 square miles, or 476,160 acres.

Population in 1900, 16,359, a gain of 7,111 since 1890; school fund, \$9,772.85.

By the Comptroller-General's report for 1900 there are: acres of improved lands, 405,693; of wild lands, 56,823; average value per acre of improved lands, \$2.24; of wild lands, \$1.98; city property, \$97,580; money, etc., \$217,009; merchandise, \$93,529; iron works, \$4,000; shipping and tonnage, \$1,000; stocks and bonds, \$550; cotton manufactories, \$250; household furniture, \$106,601; farm and other animals, \$269,887; plantation and mechanical tools, \$38,892; watches, jewelry, etc., \$5,149; value of all other property, \$240,529; real estate, \$1,120,917; personal estate, \$1,007,116; aggregate value of property, \$2,128,033.

Property returned by colored taxpayers: Number of acres, 13,090; value, \$36,590; city property, \$2,515; money, etc., \$1,543; merchandise, \$15; watches, etc., \$428; household furniture, \$13,516; farm and other animals, \$2,317; plantation and mechanical tools, \$2,971; value of all other property, \$2,310; aggregate value of property, \$84,018.

The tax returns for 1901 show an increase of \$84,646 in the value of all property since the returns of 1900.

The largest towns of the county are Mount Vernon and Vidalia.

The Mount Vernon district includes the towns of Mount Vernon and Ailey and has 2,205 inhabitants, of whom 573 live in Mount Vernon and 271 in Ailey.

The Vidalia district has 2,342 inhabitants, of whom 503 live in the town of Vidalia.

Population of Montgomery county by sex and color, according to the census of 1900: white males, 5,055; white females, 4,598; total whites, 9,653; colored males, 3,547; colored females, 3,159; total colored, 6,706.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1901: 181 calves, 156 steers, 19 bulls, 285 dairy cows, 123 horses, 168 mules, 21 sheep, 1,330 swine, 49 goats.

MORGAN COUNTY.

Morgan County was laid out from Baldwin in 1807, and was named in honor of General Daniel Morgan, who was born in New Jersey, but became a citizen of Virginia, commanding a regiment of riflemen from that State in the campaign of Saratoga, and afterwards as a general under Nathaniel Greene distinguished for his brilliant victory at the battle of Cowpens in South Carolina, January 17th, 1781.

Morgan is bounded by the following counties: Oconee and Greene on the northeast, Greene on the east, Putnam on the south, Jasper on the southwest, Newton and Walton on the northwest. The Appalachian river runs along its whole northeastern border and empties into the Oconee, which from this point runs down the eastern boundary. Other tributaries of the Oconee are Hard Labor, Indian and Sugar creeks and Little (or Little Oconee) river.

The general character of the soil is metamorphic, undulating red clay and mulatto lands, interspersed with gravelly formations and alluvial bottoms. This, though one of the oldest, is one of the best agricultural counties of Georgia. A large percentage of the land is under good cultivation, and their average production to the acre is: corn, 15 bushels; oats, 25; wheat, 8 to 10; rye, 7; barley, 20; Irish potatoes, 200; sweet potatoes, 150; field peas, 10; ground peas, 50; seed cotton, 1,000 pounds; crab-grass hay, 3,000; Bermuda grass hay, 4,000; corn fodder, stalk and blade, 6,000; sorghum syrup, 100 gallons; sugar-cane syrup, 105 gallons. In some sections of the county corn produces 30 bushels to the acre, wheat 25 and oats 40. The land is strong and easily worked. Much of it is permanently set in Bermuda grass. Hay is made from orchard grass, red top, Bermuda, crab, cowpeas and clover. Three million pounds of hay are made in Morgan county.

Of the milch-cows nearly one-third are of improved breeds. In 1890 the county had 3,844 cattle, 157 working oxen, 1,714 milch-cows yielding 426,124 gallons of milk, from which were made 138,419 pounds of butter and 3,000 pounds of cheese. There are several dairy farms near Madison. The various kinds of poultry aggregated in 1890 60,115 and produced 110,258 dozens of eggs. The honey gathered was 17,187 pounds. There were 507 sheep, yielding 942 pounds of wool. There were 687 horses, 2,008 mules, 4 donkeys and 6,555 hogs. Much attention is now being paid to the rearing of beef cattle.

Vegetables of all kinds, berries and melons are raised. The truck sold amounts to about \$8,000. The county has 2,500 apple trees and 29,758 peach trees. The largest orchard in the county has 3,000 trees. There is a canning factory where many farmers can their peaches.

Timber products are small. There are no original forests left. Along the streams second growth pine and hardwoods are found. The common growth is mostly old-field pine. Hence the lumber output from a few portable sawmills is small.

On tributaries of the Oconee are ten grist-mills.

The Georgia Railroad and the Macon and Northern branch of the Central traverse the county, the former from east to west, the latter from north to south. They cross each other at Madison, the county site, one of the most beautiful small cities of Georgia, with a population of 1,992 in the corporate limits and 2,888 in its entire district, located on the ridge which divides the waters of Sugar and Hard Labor creeks. The city has electric lights and water works. The ladies of Madison are noted for the taste displayed by them in the cultivation of the flower gardens which adorn so many of their charming homes. The court-house and jail together are valued at \$50,000. A company has been formed to build a cotton factory, and \$50,000 has been raised for that purpose. Other manufactures are: a fertilizer factory, a cotton seed oil-mill valued at \$40,000, a cotton compress, a soap factory, a spoke and handle factory valued at \$10,000, and a variety works establishment for furniture, chairs, etc., valued at \$10,000.

The Methodists, Baptists and Presbyterians have each good church buildings and good schools. There are a Masonic lodge and a Sons of Temperance organization.

All the schools of the county are either wholly or in part connected with the public school system of Georgia. They are in every militia district for white and colored separately.

At Madison are two banks with an aggregate capital of \$100,000. Besides Madison the postoffices are Appalachee, Austin, Bostwick, Buckhead, Cowan, Fair Play, Godfrey, Mallory, Maple, Nolan, Pennington, Reese, Rehoboth and Rutledge, at which latter place the sum of \$50,000 has been raised to erect a factory. There are several life and fire insurance agencies.

The cotton receipts and shipments from the entire county amount to 25,000 bales, of which the greater portion is handled at Madison. According to the census of 1900 there were ginned in this county 16,453 bales of upland cotton during the season of 1899-1900.

The area of Morgan county is 346 square miles, or 221,440 acres.

Population in 1900, 15,813, a decrease of 228 since 1890; school fund, \$11,197.72; school fund of Madison City, \$1,391.85.

By the Comptroller-General's report for 1900 there are: acres of improved land, 218,839; average value per acre, \$5.19; city property, \$499,435; shares in bank, \$145,798; cotton manufactories, \$157,760; money, etc., \$233,770; merchandise, \$103,450; stocks and bonds, \$3,200; iron works, \$35,384; household furniture, \$82,704; farm and other animals, \$137,406; plantation and mechanical tools, \$34,546; watches, jewelry, etc., \$7,366; value of all other property, \$9,282; real estate, \$1,637,000; personal estate, \$976,698; aggregate value of property, \$2,613,689.

Property returned by colored taxpayers: Number of acres, 5,855; value, \$23,208; city property, \$27,295; money, etc., \$220; household furniture, \$8,832; watches, etc., \$47; farm and other animals, \$19,601; plantation and mechanical tools, \$3,346; value of all other property, \$4; aggregate value of property, \$92,553.

The tax returns for 1901 show an increase of \$149,893 in the value of all property since 1900.

In the public schools of Morgan county the average attendance is 603 in the 24 schools for white pupils, and 984 in the 26 for colored. In the white schools of the city of Madison there are enrolled 260 pupils, and in the colored schools 137.

Population of Morgan county by sex and color, according to the census of 1900: white males, 2,620; white females, 2,587; total white, 5,207; colored males, 5,261; colored females, 5,345; total colored, 10,606.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 50 calves, 74 steers, 179 dairy cows, 122 horses, 24 mules, 344 swine, 18 goats.

MURRAY COUNTY.

Murray County was laid out from Cherokee and organized in 1832. It was named for Hon. Thomas W. Murray.

Part of the county was set off to Walker in 1833 and a part to Cass (now Bartow) county in 1834. It is bounded on the north by the State of Tennessee, on the east by Fannin and Gilmer counties, on the south by Gordon, and on the west by Whitfield county. It is watered by the Connesauga and Coosawattee rivers with their numerous tributary creeks. The former of these rivers flows along the entire western boundary, while the latter crosses the southeastern part of the county. Their united waters form the Oostenaula, which joins with the Etowah at Rome to form the Coosa. The Coosawattee being navigable nearly all the year furnishes water transportation to Rome, the leading market of Northwest Georgia. No railroad traverses the county, but the Western and Atlantic runs close to its southwestern border. Dalton, in Whitfield county, where this road crosses the Southern Railway, is the chief market for a large part of Murray county.

The land is fertile and has fine pasturage for sheep and cattle. The average yield of crops to the acre is: corn, 25 bushels; oats, 35; wheat, 25; rye, 30; Irish potatoes, 150; sweet potatoes, 200; cotton, 600 pounds; crab-grass hay, 3,200; clover, 4,000; fodder, 600; sorghum syrup, 150 gallons. According to the United States census of 1900 there were ginned in this county 2,586 bales of upland cotton in the season of 1899-1900.

In 1890 there were 2,506 sheep in the county yielding 4,557 pounds of wool. There were 5,656 cattle, 378 working oxen, 1,941 milch-cows, which produce 513,110 gallons of milk, from which were made 135,139 pounds of butter and 97 pounds of cheese. The domestic fowls of all varieties aggregated 68,021 and produced 83,146 dozens of eggs. The honey gathered amounted to 17,755 pounds. There were 1,026 horses, 840 mules, 17 donkeys and 8,511 hogs.

This county is rich in minerals. The Cohutta Mountain range crosses its eastern section. On these mountains profitable mining has been done. In sheltered orchards along this famous range some of the most luscious fruit is grown.

Spring Place, once a missionary station among the Cherokees, now a thriving little town, is the county site. It is situated in the midst of charming scenery with the Cohutta Mountains in full view. This town has a handsome court-house, good schools and churches. The whole county is well provided with schools, and churches of the Baptists and Methodists are in every section. The average attendance of pupils in the public schools is 1,005 in the 38 schools for whites, and 120 in the 5 schools for colored pupila.

The area of Murray county is 352 square miles, or 225,280 acres.

Population in 1900, 8,623, an increase of 162 since 1890; school fund, \$6,499.66.

By the Comptroller-General's report for 1900 there are: acres of improved land, 188,267; of wild land, 40,165; average value per acre of improved land, \$3.60; of wild land, \$0.29; city property, \$14,400; money, etc., \$89,077; merchandise, \$17,330; household furniture, \$43,846; farm and other animals, \$153,523; plantation and mechanical tools, \$38,950; watches, jewelry, etc., \$2,293; value of all other property, \$17,178; real estate, \$704,316; personal estate, \$368,595; aggregate value property, \$1,072,911.

Property returned by colored taxpayers: Number of acres of land, 350; value, \$635; household furniture, \$753; farm and other animals, \$2,712; plantation and mechanical tools, \$450; value of all other property, \$76; aggregate value of property, \$4,975.

The tax returns for 1901 show an increase of \$7,009 in the value of all property since the returns of 1900.

Cohutta Springs are 10 miles from Spring Place on the waters of Sumac creek. The water is said to possess splendid medicinal properties. There are fine springs in almost every section of the county.

On the Cohutta Mountains are the remains of an ancient fort, for what purpose erected none can tell.

Population of Murray county by sex and color, according to the census of 1900: white males, 4,075; white females, 4,027; total white, 8,102; colored males, 258; colored females, 263; total colored, 521.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 1 calf, 4 dairy cows, 3 horses, 2 mules, 12 swine.

MUSCOGEE COUNTY.

Muscogee County was laid out in 1826, and named for an Indian tribe which once inhabited that part of the State. In 1827 parts were set off to Harris, Talbot and Marion counties, and in 1829 parts were taken from Marion and Harris. It is bounded by the following counties: Harris and Talbot on the north, Talbot and Marion on the east, and Chattahoochee on the south. The State of Alabama, from which it is separated by the Chattahoochee river, bounds it on the west. The Chattahoochee affords steamboat navigation from the city of Columbus to the Gulf of Mexico. The smaller streams, all tributaries of this river, are Upatoi, Randall's, Nocheefaloochee, Bull, Standing Boy, Juniper and West End creeks.

The soil is very much mixed. Half of the county is in the cretaceous and half in the metamorphic region. In the northern section are rolling, red clay lands; in the southern, sandy loams; on the Chattahoochee river hummock lands; through the center of the county, a mulatto strip. The timber growth is just as varied; from yellow pine and hummock to oak and chestnut. The water is both limestone and freestone. A great deal of the land along the Chattahoochee river is unsurpassed anywhere in fertility. In the portion subject to overflows so great is the yield that if only one crop in every three should succeed, the river lands prove very profitable to the owners.

Taking the average of all lands in the county the yield to the acre is: corn, 10 to 12 bushels; oats, 11 bushels; seed cotton, 520 pounds; hay, 3,600; sugar-cane syrup, 100 gallons. The hay is chiefly made from crab and Johnson grasses. On the best lands the yield to the acre is: corn, 50 bushels; oats, 40 bushels; seed cotton, 1,000 pounds.

Fruits, melons, berries and vegetables of every description are raised, especially in the vicinity of Columbus, for marketing purposes, and are very remunerative to those engaged in this industry. Watermelons and cantaloupes are very fine and bring good profits in the Columbus market. There are 25 market gardens, large and small, and the value of truck sold amounts to more than \$30,000. There are in this county 127,980 acres of farm lands, cleared and uncleared, divided into farms averaging about 600 acres each, every one of which is abundantly supplied with water flowing from bold springs. Irrigation is practiced to some extent.

There are 25 dairy farms, whose capacity is 600 gallons of milk and 500 pounds of butter per diem. The Jersey is the favorite cow. The foods preferred as giving the best results are wheat bran, cotton seed meal, corn meal, ensilage and hay from the peavine and from crab and Johnson grasses.

The rearing of beef cattle for the market is attracting more attention than ever before. It is estimated that the interest this year—1900—has increased 50 per cent. In 1890 there were in Muscogee county 3,605 cattle, 155 working oxen, 1,484 milch-cows yielding 375,664 gallons of milk, from which were produced 96,604 pounds of butter. There were 27,710 domestic fowls, producing 61,155 dozens of eggs. The consumption of poultry is about five times as much as are raised. This is probably true also of butter and eggs, all of which are brought in from surrounding counties. The honey produced in the county amounted in 1890 to 8,559 pounds.

There were also reported in 1890 148 sheep, with a wool-clip of 290 pounds; 463 horses, 972 mules, 2 donkeys and 3,338 swine. These statistics do not include the live stock in the city of Columbus.

Many fish are caught in the river and creeks, and many are brought in from other points. Game is plentiful.

Very little of the original timber is left in the county, not more than 20 per cent. About 40 per cent. of the county is under cultivation and 40 per cent. of what was once cultivated is covered with a second growth of timber. Pine predominates, but in the northern part of the county

there is considerable oak, hickory, poplar, chestnut and dogwood. The products are slight. Some shingles, staves, etc., are sawed, perhaps \$8,000 worth in all.

Farm lands in Muscogee county can be bought at from \$5 to \$40 an acre.

There are in Muscogee county five florists' establishments doing a good business.

Columbus, the fifth city of the State in population, is the second in the south in the manufacture of cotton goods, Augusta alone exceeding it. Columbus has for 49 years been a cotton and woolen manufacturing point, and there is here an abundance of skilled white labor, the only kind used in the cotton and woolen mills of Georgia. The Eagle and Phoenix Manufacturing Company has three mills with an aggregate of 1,492 looms and 50,000 spindles. Their mills use 18,000 bales of cotton per annum. The Muscogee Mills have 450 looms and 16,000 spindles, and use 7,500 bales of cotton. The Swift Mills have 400 looms and 13,000 spindles, and use 5,200 bales of cotton. The Hamburger Mills have 210 looms and 6,000 spindles, and use 2,800 bales. The Columbus Manufacturing Company's mill has 800 looms and 25,000 spindles, and uses 6,500 bales of cotton. The grand total is 3,352 looms, 110,000 spindles and 40,000 bales of cotton. The Bibb Manufacturing Company, of Macon, is putting up a new mill which will have 600 looms and 20,000 spindles. Some of the mills of Columbus gin the cotton received from the farm and then save the cost of baling. The total receipts of cotton at warehouses and compresses are 150,000 bales a year. The warehouse receipts alone are 60,000 bales.

Other manufactories at Columbus are: a sugar refinery, 2 compresses, 2 cotton seed oil-mills, 2 flour and grist-mills, 4 lumber and planing mill, 2 foundries valued at \$200,000, 1 plow and 1 gin factory, 1 barrel factory, 3 sash and blind factories, 1 furniture factory, 1 box factory, 1 showcase manufactory, 1 ice factory, wagon, broom and pants factories, 1 guano factory, cider and vinegar works, marble yards and brick yards, and one canning factory with a capacity of 8,000 cans daily. The number of hands employed in all these manufactories is 3,000, receiving wages amounting to \$15,300 a week.

Five cotton, 1 woolen and 1 flour-mill are operated by water-power. There are two falls within the corporate limits of the city, and in this county are 17,000 horse-powers yet undeveloped. Immediately contiguous to the city and extending for forty miles north is an inexhaustible supply of water power yet to be developed.

Corporations of any respectable magnitude, wishing to locate in Columbus, can obtain free and ample mill sites, well located for steam mill plants with railroad front.

Columbus enjoys a fine wholesale trade, and the present jobbing trade of the city reaches eleven Southern States.

There are five banks in the city with a combined capital of \$550,000.

About 80 life and fire insurance companies are represented by 20 agencies.

The city has gas and electric lights, water works, an electric street railroad and two power houses.

Seven railroads center here, and two of them have shops at this point.

Four lines of steamboats, plying on the river, give competition in freight by water. The court-house cost \$105,000, the hospital, engine-house and market \$40,000, the United States postoffice \$125,000. Two bridges spanning the Chattahoochee cost \$25,000.

There are 18 churches for whites, valued at \$265,000, and 11 for colored, valued at \$48,000. All denominations are represented.

Columbus was the first city in the south to adopt the graded public school system. There are 6 city public schools for white and 4 for colored children. The whole county is well provided with schools and churches.

The average attendance of pupils in the public schools of Muscogee county outside of the city of Columbus is 400 in the 18 schools for whites, and 678 in the 19 for colored pupils. In the city schools of Columbus, which also belong to the public school system of Georgia, there are enrolled 1,222 in the schools for whites, and 1,368 in the schools for colored. Besides these there are 323 pupils in private institutions for whites, and 160 in the industrial school for colored pupils.

In this connection the important work done by the Eagle and Phoenix Manufacturing Company for its operatives, through the agency of its president, G. Gunby Jordan, is worthy of all praise. The Eagle and Phoenix Club was instituted for the exclusive benefit of the 1,800 operatives of that great corporation. It has a large, bell-built brick building, which embraces an auditorium capable of seating about 800 people, a gymnasium and a free circulating library of over a thousand volumes. Each member of the club is allowed to take home two copies from this library at one time, and thus his family gets as much benefit from it as he does himself. A physical instructor is constantly employed who meets classes in gymnastics and athletics three times a week. At the auditorium a lyceum course, embracing twelve numbers, is regularly given during the winter months. These evening entertainments are of the best and include illustrated lectures of travel, dramatic entertainments of a high order, experiments in electricity, chemistry and liquid air. In addition to these are concerts given by the individual members of the club or their friends. A musical class is taught by capable professors. In the library much of the current literature of the day can be obtained.

Other manufacturing establishments in Georgia have adopted similar arrangements for the benefit of their operatives.

According to the census of 1900 the population in the corporate limits of Columbus was 17,617, but, including suburban resorts, it amounts to about 25,000.

In 1900 there were ginned in Muscogee county 7,042 bales of upland cotton, which amount represents nearly the production of the county.

The area of Muscogee county is 255 square miles, or 163,200 acres. The population in 1900 was 29,836, a gain of 2,075 since 1890. The school fund for the county was, by the report of the Commissioner of

Education, \$7,646.63 for 1900, and to this should be added the special assessment for the local system of Columbus, amounting to \$9,515.35.

The report of the Comptroller-General for 1900 gives the property returned for taxation as follows: Acres of improved land, 139,597; value per acre, \$9.39; city and town property, \$6,046,665; gas and electric lights, \$92,600; shares in bank, \$516,015; money and solvent debts, \$1,077,920; building and loan associations, \$216,190; merchandise, \$989,095; shipping and mining, \$24,000; stocks and bonds, \$453,790; cotton manufactories, \$943,530; iron works, \$158,100; household furniture, \$544,735; farm and other animals, \$119,875; plantation and mechanical tools, \$42,455; watches, jewelry, etc., \$51,030; value of all other property, \$138,205; real estate, \$7,457,615; personal estate, \$5,497,540; aggregate value of whole property, \$12,206,545.

Property returned by colored taxpayers: Number of acres of land, 5,448; value, \$91,175; city or town property, \$153,735; money and solvent debts, \$1,815; merchandise, \$695; household furniture, \$68,930; watches, etc., \$405; farm and other animals, \$12,580; plantation and mechanical tools \$1,990; value of all other property, \$315; aggregate value of all property, \$331,640.

The tax returns for 1901 show a gain of \$1,043,285 in the value of all property since the returns of 1900.

Population of Muscogee county by sex and color, according to the census of 1900: white males, 6,813; white females, 7,416; total white, 14,229; colored males, 7,026; colored females, 8,581; total colored, 15,607.

Population of the city of Columbus by sex and color, according to the census of 1900: white males, 4,881; white females, 5,456; total white, 10,337; colored males, 3,009; colored females, 4,268; total colored, 7,277.

The population of Columbus, 17,614.

Domestic animals in Muscogee county in barns and inclosures, not on farms or ranges, June 1, 1900: 109 calves, 8 steers, 5 bulls, 383 dairy cows, 550 horses, 181 mules, 620 swine, 46 goats.

NEWTON COUNTY.

Newton County was laid out from Jasper, Walton and Henry in 1821. Part of it was given back to Jasper in 1822 and again in 1834. A part was given to DeKalb in 1826.

This county was named in honor of Sergeant John Newton, a companion of Sergeant Jasper, and a sharer with his friend in the brilliant rescue of an American prisoner from a British guard, consisting of a sergeant and eight men, at a spring two miles from Savannah, just within the edge of a forest of oaks and gums.

Newton county is bounded as follows: Walton county on the northeast, Morgan and Jasper on the southeast, Butts and Henry on the southwest, and Rockdale on the northwest. Terminating in a point both at the north and south Newton county has no strictly northern or southern boundary.

The streams are the South, Yellow and Alcovy rivers, all tributaries of the Ocmulgee, which bounds it for a short distance on the extreme south.

The soil belongs to the metamorphic formation. The surface is rolling, and broken in the southern and southeastern parts of the county. The soil is a stiff red clay, with some gray land in the eastern and northern portions. The lands under proper cultivation will yield per acre according to location on uplands or bottom lands: corn, 12 to 20 bushels; wheat, 7 to 10 bushels; oats, 10 to 30 bushels; rye, 8 to 10 bushels; barley, 20 bushels; Irish potatoes, 125 bushels; sweet potatoes, 100 bushels; field-peas, 8 to 10 bushels; ground-peas, 30 bushels; seed cotton, 500 to 700 pounds; crab-grass, 2,500 pounds; Bermuda, 2,000 pounds; corn fodder, blade and stalk, 4,000 pounds; sorghum syrup, 75 gallons; sugar-cane syrup, 100 gallons.

The farmers are beginning to pay considerable attention to hay from the cow-pea vines and such grasses as Bermuda, crab, clover, and red-top. All forage crops do well.

Attention is being paid to the improvement of dairy cattle and the Jersey is the favorite. There is one dairy farm with a capacity of 50 gallons of milk a day. There are cows owned by the majority of farmers, and butter is made on every farm. In 1890 there were in Newton county 3,888 cattle, of which 1,568 were milch-cows producing 404,505 gallons of milk, from which were made 110,332 pounds of butter and 108 pounds of cheese. The domestic fowls of all kinds numbered 70,064 and produced 100,826 dozens of eggs. There was also a product of 14,840 pounds of honey. There were 299 sheep, with a wool-clip of 482 pounds, 686 horses, 1,596 mules, 5 donkeys and 5,080 hogs.

Vegetables, berries, melons and fruits are raised in sufficient quantities for home consumption. The truck sold amounts to \$8,000. There are 39,672 peach-trees, 6,678 apple-trees, 4,100 plum-trees, 1,730 pear-trees, and 750 cherry trees.

The hardwood forest growth, except in the southwestern and southeastern section of the county, is almost destroyed. It has been mainly succeeded by a second growth of short-leaf pine. The timber products are inconsiderable, perhaps \$4,500 worth annually in "old-field" pine lumber and some oak and poplar.

The water-powers utilized are: on South river, 3 mills, 47 horse-powers; on Yellow river, 8 mills, 267 horse-powers; on Alcovy river, 4 mills, 93 horse-powers. The water-powers not utilized are: On Ocmulgee river, 1,614 gross horse-power; on South river, 1,418 gross horse-power; on Yellow river, 4,395 gross horse-power; on Alcovy river, 531 gross horse-power.

Covington, the county seat, named for General Covington, is located on a ridge $3\frac{1}{2}$ miles east of Yellow river and 3 miles west of the Alcovy. It has a court-house worth \$35,000. A street railway connects the business portion of the city with the railroad station. The Georgia railroad connects it with Atlanta and Augusta, and a branch of the Central of Georgia, with Macon and Savannah. It has for whites 3 Methodist

churches, 1 Presbyterian and one Baptist, and for colored people 2 Baptist and 2 Methodist churches. Churches for white and colored are in every village in the county. Covington has a fine system of public schools. It has a successful bank with a paid up capital of \$80,000. A new cotton-mill to manufacture sheetings is approaching completion. It will have 320 looms and 5,000 spindles. The capital invested is \$100,000. Connected with Covington by a short railroad is the Porterdale Mill, belonging to the Bibb Manufacturing Company of Macon. This mill has in operation 80 looms and 6,000 spindles, and a capital of \$125,000. There are altogether in Newton county 10 sawmills. Several grist-mills on the water courses have already been mentioned. The manufacturing of every sort in Newton county are 31, with an annual output of \$193,472. This will be greatly increased when the new cotton-mill gets into operation. The mill at Porterdale uses 12,000 bales of cotton annually.

The cotton receipts and shipments of Covington are about 15,000 bales. The population of this city is 2,062, and of the whole district, 3,083. According to the United States census of 1900 there were ginned in Newton county 14,373 bales of upland cotton during the season of 1899-1900.

About two miles to the northwest of Covington is Oxford, a town of 800 inhabitants, the seat of Emory College, which is one of the foremost educational institutions in the South, and the property of the North and South Georgia and Florida conferences of the Methodist Episcopal Church, South. The population of the whole district of Oxford is 1,149. This town is connected with Covington by a street railway. Other post-offices are Almand, Cora, King, Sequin, Newborn, Newton Factory, Snapping Shoals, Sarroville, Stewart and Winston.

Newton is one of the best counties in Middle Georgia with a cultured and refined population, enjoying the best religious and educational advantages.

This county has brick clay and granite of excellent quality. One granite quarry is in operation.

The area of Newton county is 259 square miles, or 165,760 acres. Population in 1900, 16,734, a gain of 2,424 since 1890; school fund, \$9,773.34; Covington city school fund, \$1,266.11.

By the Comptroller-General's report for 1900 there are: acres of improved land, 166,673; average value per acre, \$5.88; city property, \$45,241; shares in bank, \$50,000; money, etc., \$326,385; merchandise, \$115,520; stocks and bonds, \$2,350; cotton manufactories, \$549,270; household furniture, \$116,015; farm and other animals, \$155,261; plantation and mechanical tools, \$48,000; watches, jewelry, etc., \$9,514; value of all other property, \$38,400; real estate, \$1,428,636; personal estate, \$1,459,665. Aggregate value of whole property, \$2,865,063.

Property returned by colored taxpayers: number of acres of land, 4,074; value, \$24,303; city property, \$65,585; money, \$1,385; merchandise, \$100; household furniture, \$12,239; watches, etc., \$313; farm and

other animals, \$21,253; plantation and mechanical tools, \$5,338; value of all other property, \$773.00. Aggregate value of property, \$104,693.

The tax returns of 1901 show a gain of \$136,845 in the value of all property since 1900.

The average attendance of pupils in the public schools is 920 in the 28 schools for whites, and 689 in the 27 schools for colored pupils. The city of Covington has an enrollment of 233 in the white schools, and 250 in the colored schools.

Population of Newton county by sex and color, according to the census of 1900: white males, 4,348; white females, 4,241; total white, 8,589; colored males, 3,955; colored females, 4,190; total colored, 8,145.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 92 calves, 34 steers, 3 bulls, 141 dairy cows, 106 horses, 21 mules, 33 sheep, 279 swine and 2 goats.

OCONEE COUNTY.

Oconee County was laid out from Clarke, and derived its name from the Oconee river. It is bounded by the following counties: Clarke on the northeast, Oglethorpe on the east, Greene on the south, Morgan and Walton on the southwest, and Jackson on the northwest. The Oconee river is on its eastern boundary, the Appalachee on the southwest boundary. Barber creek, running a short distance on its north-eastern border, empties into the Oconee river.

The surface of the country is broken and hilly. The soil is metamorphic, with red and gray lands. According to culture and location the lands will yield: corn, 10 to 15 bushels; oats, 10 to 20; wheat, 6 to 12; rye, 7 to 9; barley, 20 to 30; Irish potatoes, 100 to 175; sweet potatoes, 125 to 150; field-peas, 8 to 15; ground-peas, 20 to 40; seed cotton, 500 to 600 pounds; crab-grass hay, 3,000 to 4,000 pounds; clover, 3,750 to 5,000 pounds; Bermuda grass hay, 4,500 to 6,000 pounds; corn fodder, 250 pounds; sorghum syrup, 120 to 150 gallons; sugar-cane syrup, 75 to 100 gallons. According to the United State census of 1900, there were ginned in this county, 7,349 bales of upland cotton of the season of 1899-1900.

Some attention is paid to the improvement of dairy cattle. The whole number of cattle in the county in 1890 was 3,102. There were 1,218 milch-cows yielding 339,490 gallons of milk and 120,915 pounds of butter. All kinds of poultry aggregated 51,851, and yielded 52,056 dozens of eggs. The production of honey was 11,043 pounds. There were 595 sheep, with a wool-clip of 894 pounds, 589 horses, 756 mules, 3 donkeys and 4,409 hogs.

In addition to vegetables, berries and melons consumed on the farms about \$3,000 worth are sold annually. The peach-trees number 17,521, and the apple-trees, 5,993.

Along the streams for the most part the forest growth consists of sycamore, poplar, maple, ash and gum. Other sections have oak, hickory, chestnut and walnut. There is also some short-leaf pine. The output of the sawmills is about \$5,000 worth.

The mineral products consist of some mica, feldspar, hornblende and gneiss. The water is pure freestone.

On the Oconee and tributaries 4 grist-mills employ 360 horse-powers. The gross unutilized horse-powers of the Oconee river are 4,923. There are altogether 14 manufactories with an output valued at \$46,836. At High Shoals, on the Appalachee river, is a cotton factory with 150 looms, 5,000 spindles and a capital of \$150,000.

Watkinsville, the county site, is located within a belt of red lands which run across the county from the upper portion of Clarke southward into Morgan county. It is on the Macon and northern branch of the Central of Georgia Railroad, which traverses the county from north to south. The Seaboard Air Line Railroad runs across the northeast corner of Oconee county. The Watkinsville district contains, 1,535 inhabitants, of whom 351 live in the town.

This county has 22 schools for whites, and 16 for colored, and the average attendance is 621 whites and 739 colored. Churches for both races are found in every section of the county. The Baptists and Methodists are the leading denominations.

The area of Oconee county is 184 square miles, or 117,760 acres. Population in 1900, 8,602, a gain of 889 since 1890; school fund, \$6,102.92.

By the report of the Comptroller-General for 1900 there are: acres of improved land, 112,614; average value to the acre, \$5.95; city property, \$18,980; gas and electric light companies, \$596; money, \$57,389; merchandise, \$17,095; cotton manufactories, \$65,000; value of household furniture, \$57,851; farm and other animals, \$101,587; plantation and mechanical tools, \$31,817; watches, jewelry, etc., \$2,619; value of all other property, \$20,118; real estate, \$688,992; personal estate, \$360,253. Aggregate value of property, \$1,049,245.

Property returned by colored taxpayers: number of acres, 2,667; value, \$17,045; merchandise, \$50; money, \$375; household furniture, \$10,650; farm and other animals, \$15,546; plantation and mechanical tools, \$4,097; value of all other property, \$1,193. Aggregate value of whole property, \$48,979.

The tax returns for 1901 show a gain of \$26,890 in the value of all property since the returns of 1900.

Population of Oconee county by sex and color, according to the census of 1900: white males, 2,083; white females, 2,106; total white, 4,189; colored males, 2,199; colored females, 2,214; total colored, 4,413.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 16 calves, 1 steer, 38 dairy cows, 20 horses, 3 mules, 41 swine.

OGLETHORPE COUNTY.

Oglethorpe County was laid out in 1793. A part was taken from Greene in 1794. The boundaries were somewhat changed in 1799. when parts of Oglethorpe were added to Greene, and parts of Greene to Oglethorpe. A part was set off to Madison county in 1811, and a portion was

taken from Clarke in 1813. Another part was set off to Taliaferro in 1825, and a part added to Madison county in 1831. This county was named for General James Edward Oglethorpe, one of the founders and the first governor of Georgia. It is bounded on the north by Madison county, northeast by Elbert, on the east by Wilkes, on the southeast by Wilkes and Taliaferro, south by Greene and west by Clarke and Oconee.

Broad river separates the county from Elbert, and the Oconee river forms a part of its western boundary. Little river is in the southeastern part of the county. Other streams are: Long, Clouds, Dry Fork, Big, Buffalo, Indian, Beaver Dam and Falling creeks.

Although there are so many streams, the fish have nearly all been caught out of them, and most of the game has been destroyed by the negroes.

The face of the country is hilly. The soil is varied. In the western part it is red or mulatto, in the central portion gray sandy, and in the eastern a mixture of both. The soils result from decomposition of granite, gneiss, slates and hornblendic slates. According to location and mode of cultivation the lands yield to the acre: corn, 10 to 15 bushels; wheat, 8 to 15 bushels; oats, 12 to 15 bushels; rye, 10 to 15 bushels; barley, 20 to 25 bushels; Irish potatoes, 80 to 100; sweet potatoes, 50 to 100 bushels; field-peas, 10 to 15 bushels; ground-peas, 25 to 50 bushels; seed cotton, 500 to 700 pounds; crab-grass hay, 3,000 pounds; Bermuda and clover, each 4,000 pounds; corn fodder, 500 pounds; sorghum syrup, 100 gallons. According to the United States census of 1900, there were ginned in this county 19,276 bales of upland cotton of the season of 1899-1900.

This county is well adapted to the grass and forage crops. Those who make hay find it very remunerative. There are two dairy farms with 100 or more pure bred cattle. Some other farmers in the county have pure bred and mixed cattle. There is also improvement in the breed of beef cattle. The dairy cows preferred are Jerseys, Holsteins and Red Poll.

In 1890 there were in all 7,181 cattle. Of these there were 2,581 milch-cows producing 640,333 gallons of milk, from which are made 194,134 pounds of butter. There are in the county, by a recent count, 6 Polled Angus bulls.

In 1890 there were in this county 1,301 horses, 1,924 mules, 7 donkeys, 8,497 hogs and 1,000 goats. The sheep, numbering 1,350, gave a wool-clip of 2,087 pounds. The domestic fowls of all kinds numbered 84,593, and produced 88,970 dozens of eggs. The honey gathered amounted to 20,736 pounds.

Vegetables, berries, melons and fruits are raised for home consumption exclusively. No section produces finer fruits and melons.

The forest growth consists of the various kinds of oak, pine, hickory, poplar, birch, ash, maple, sweet-gum, black-gum, dogwood and cedar. The annual output of timber is 1,000,000 superficial feet, at an average price of \$5.00 a thousand feet. About 20 sawmills are engaged in this business.

The mineral products are gold, granite, graphite and ochre. The gold is now being mined and two gold mills are beginning operations with good chances of success. About \$30,000 is invested in this business. There is abundance of trap rock for road material, and granite of the finest quality is plentiful.

There are valuable water-powers at Watson's and Andrews Shoals. There are in the county 20 grist-mills, valued at \$20,000.

Smithonia has a large guano and cotton seed oil manufactory, and is the terminus of a short road known as the Smithonia and Dunlap. A new road is being built from this point to Danielsville and Carnesville, the county sites of Madison and Franklin counties.

Lexington, the county seat of Oglethorpe, is the terminus of a branch road which runs to Crawford, on the Athens branch of the Georgia Railroad. It has a court-house, valued at \$35,000; a bank with a capital of \$15,000, and several prosperous commercial establishments. The Lexington district has a population of 1,960, of whom 635 live in the town. This town has been noted for its refined and cultured society. Here some of the most distinguished men of Georgia have resided—Wm. H. Crawford, Thomas W. Cobb, Stephen Upson, George R. Gilmer and the Lumpkins. Wm. H. Crawford was born in Virginia in 1772, and came to Georgia with his father in 1783. As a young man he taught school in Columbia county and then in Augusta. In 1799 he began the practice of law in Lexington. For four years he represented the county of Oglethorpe in the Georgia Legislature. In 1806 he was elected United States Senator and again in 1811. He was afterwards American Minister to Paris, then Secretary of the United States Treasury, and in 1825 received a flattering vote for the office of President of the United States. In 1827, upon the death of Judge Dooley, he was appointed judge of the northern circuit. This office he held until his death, September 15, 1834.

This county is well provided with churches and schools. There are nine Baptist and eight Methodist churches for whites. There are also many for colored people. There are a few members of other denominations. There is a Disciples' (Christian) church. There are 72 schools, 33 for whites, with an attendance of 1,030, and 39 for colored with an attendance of 1,047.

The area of Oglethorpe county is 575 square miles, or 368,000 acres. Population in 1900, 17,881, a gain of 930 since 1890; school fund, \$11,457.88.

By the report of the Comptroller-General for 1900, there are: acres of improved land, 272,887; average value per acre, \$3.48; city property, \$83,870; shares in bank, \$12,000; money, etc., \$196,235; merchandise, \$44,890; stocks and bonds, \$18,050; cotton factories, \$5,075; mining, \$400; household furniture, \$59,352; farm and other animals, \$133,503; plantation and mechanical tools, \$32,890; watches, jewelry, etc., \$3,786; value of all other property, \$82,819; real estate, \$1,032,661; personal estate, \$545,390. Aggregate value of whole property, \$1,578,051.

Property returned by colored taxpayers: number of acres, 9,036;

value, \$30,579; city property, \$2,850; money, etc., \$457; household furniture, \$4,312; watches, etc., \$55; farm and other animals, \$17,567; plantation and mechanical tools, \$3,303; value of all other property, \$273.00. Aggregate value of whole property, \$59,396.

The tax returns for 1901 show a gain of \$39,127 in the value of all property since the returns of 1900.

Population of Oglethorpe county by sex and color, according to the census of 1900: white males, 2,826; white females, 2,812; total white, 5,638; colored males, 6,184; colored females, 6,059; total colored, 12,243.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 8 calves, 12 steers, 19 dairy cows, 11 horses, 30 swine, 1 goat.

The model farm of Mr. James M. Smith in Oglethorpe county, is a good illustration of what can be accomplished on the average lands of Georgia.

Returning from his service in the Confederate army at the close of hostilities in 1865, Mr. Smith began operations on a few acres of poor land, with one mule to aid him in his work, and himself holding the plow handles. After "laying by" his crop, he peddled tinware during the summer, driving that same mule.

A wealthy neighbor, to whom he displayed his wares, not only refused to purchase, but with a mistaken idea that he had ingloriously abandoned the field of agriculture, reproached him with leaving a noble calling for the inglorious life of a peddler.

"Give me time," replied Mr. Smith, "and I will own a calf pasture as large as your entire farm."

About twenty years later Mr. Smith gave a dining to his neighbors, and among his guests was his former critic. In the afternoon the assembled friends walked with him over his farm, looked at his fields with their promise of plenty, admired his dairy herd and stopped in front of his calf pasture. Turning to his friend who had once so misunderstood his purpose, he said: "I believe you return so many acres." "Yes," answered the friend. "That is just the size of my calf pasture," replied Mr. Smith.

These wonderful results had been accomplished by diligent labor intelligently applied.

A man of education, he had not disdained to study writers on agriculture and to follow their advice, wherever it appeared suited to his conditions. By studying the nature of his soil, supplying it with the necessary plant-food, and diversifying his crops, using his brains as well as his hands, and superintending everything himself, he has year by year added to his possessions, until his one-mule farm has become one of the largest in Georgia, covering 30 square miles of land, and giving employment to 1,250 men, women and children.

For years he has made an average of 25 bushels of corn to the acre; 15 bushels of wheat and 1,000 pounds of seed cotton.

For a number of years he has kept on hand 500 head of cattle, which he pastures in the summer, and feeds in the winter on cotton-seed hulls and meal together with forage. His milch-cows number from 75 to 100 and are Jerseys, Devons and Holsteins, some of pure blood and some mixed. These cows have produced each year about 20,000 pounds of butter, bringing from 18 to 25 cents a pound, wholesale. He has been able to sell about 100 head of cattle a year without diminishing his herd.

The cattle are kept in an inclosure of fifteen acres, being moved occasionally to another lot, and every month or so the ground is turned.

Thus he has made rich, several hundred acres of land, on some of which he has made from 30 to 35 bushels of wheat to the acre; on other portions, two bales of cotton to the acre, and on some, 65 bushels of corn to the acre.

All this land, which at first was not worth more than \$10.00 an acre he considers cheap at \$50.00 an acre.

With agriculture Mr. Smith combines manufacturing, and the raw material produced from the soil is turned into a valuable manufactured article by means of the steam ginnery, oil mill and fertilizer factory.

Mr. Smith hires negro laborers, and by his care for their comfort, and skillful direction of their toil, combined with the guardianship which he exercises over their affairs, wisely mingling kindness and firmness, has won their esteem and secured their loyal service.

On his large estate, a sawmill cuts the lumber for his various houses, a brick-yard turns out the brick and his wagons are made in his own shop. The carpentry work is done by men who learned their trade on the estate.

Besides all these, his own railroad, 17 miles long, hauls material to his factories and takes his marketable products to the outside world.

Of three divisions of the farm, one is worked by convicts, one by wage laborers, and one by tenants and croppers, the best results being derived from free labor working for wages. Of 400 adult male laborers usually 75 or 100 have been convicts, whom he did not use previous to 1880.

The average annual product of his farm is 2,200 bales of cotton; 120,000 gallons of cotton seed-oil; 3,000 tons of fertilizer; 20,000 bushels of corn; 10,000 bushels of wheat; 1,000 of rye; 5,000 of oats; 6,000 of peas; 20,000 pounds of butter; 100,000 pounds of fat cattle; 50 pounds of bacon and hams, besides such crops as sweet and Irish potatoes, water-melons, ground-peas, sorghum, etc.

PAULDING COUNTY.

Paulding County and nine others were laid out from Cherokee and organized in 1832. It was named in honor of John Paulding, of New York, one of the captors of Major André. It is bounded by the following counties: Bartow on the north, Cobb on the east, Douglas and Carroll on the south, Haralson and Polk on the west. A section of the county on the middle of the western boundary projects in such a manner as to have Polk on both the northern and western sides. There is a simi-

lar, though much shorter projection into Cobb county on the eastern side.

The Tallapoosa river has its source in this county. Pumpkin Vine creek flows northward into the Etowah river, and Sweetwater creek eastward and southward into the Chattahoochee. Other creeks are Little Cedar, Day, Floyd, Hill's Camp, Euharlee and Raccoon.

In the month of May, 1864, the Union and Confederate armies faced each other along the line of Pumpkin Vine creek from Dallas to Allatoona. For ten days (May 25th to June 4th) there was incessant fighting, and during this time three pitched battles were fought, viz.: New Hope Church (May 25), Pickett's Mill (May 27), and Dallas (May 28). The first two were favorable to the Confederates, the last, to the Federals. The whole series of battles and skirmishes to June 4th are classed as one engagement by both Johnston and Sherman, and styled by each the battle of New Hope Church. Sherman pronounced it a drawn battle with decisive success to neither.

There are some fine bodies of land in this county, especially on the creeks and in the valleys. The lands, from the best to the poorest, under fair cultivation, give a yield to the acre as follows: corn, 20 bushels; oats, 15; wheat, 12 to 15; rye, 10; barley, 12; Irish potatoes, 75; sweet potatoes, 50; field-peas, 10; ground-peas, 15; seed cotton, 700 pounds; sorghum syrup, 75 gallons. Some of the best lands yield double these amounts of wheat and oats. A large part of the county is hilly with some ridges that rise almost to the dignity of mountains.

Oak and hickory, pine, gum and maple furnish fine timber. There is any quantity of building stone. Gold has been found in some places, and in considerable quantities near Burnt Hickory.

There are good water-powers on some of the streams, and some of them are utilized by grist-mills. Good freestone water abounds, and the climate is healthful.

In farm products this county shows up well. In 1890 there were 1,289 sheep, with a wool-clip of 2,016 pounds. Of the 6,025 cattle there were 652 working oxen and 2,581 milch-cows. These 2,581 milch-cows yielded 673,388 gallons of milk, from which were made 213,806 pounds of butter. The 90,733 domestic fowls of every variety produced 192,367 dozens of eggs. From the hives were gathered 22,103 pounds of honey. There were 594 horses, 1,267 mules, 4 donkeys and 8,644 swine.

Dallas, the county site, on a branch of the Southern Railway, was named in honor of George M. Dallas of Pennsylvania, vice-president under James K. Polk. The first county site was Van Wert, named for a companion of John Paulding, who shared with him and David Williams the honor of capturing André and thereby discovering the treason of Benedict Arnold. Dallas has a good court-house and a bank. It has also a cotton-mill with 70 looms, 3,500 spindles, and a capital of \$75,000. The Dallas district has 1,866 inhabitants, of whom 644 live in the town.

According to the United States census of 1900, there were ginned in this county 9,154 bales of upland cotton during the season of 1899-1900.

Methodists and Baptists are the prevailing denominations.

The schools belong to the public school system of Georgia. The average attendance is 1,161 in 47 schools for whites and 146 in 8 schools for colored.

The area of Paulding county is 329 square miles, or 210,560 acres. Population in 1900, 12,969, an increase of 1,021 since 1890; school fund, \$8,539.75.

By the Comptroller-General's report for 1900 there are: acres of improved land, 134,593; of wild land, 21,006; average value per acre of improved land, \$4.31; of wild land, \$0.68; city property, \$72,699; money, etc., \$118,101; merchandise, 42,845; stocks and bonds, \$130; household furniture, \$68,736; farm and other animals, \$168,602; plantation and mechanical tools, \$39,340; watches, jewelry, etc., \$2,726; value of all other property, \$35,793; real estate, \$883,208; personal estate, \$524,791. Aggregate value of whole property, \$1,407,999.

Property returned by colored taxpayers: number of acres of land, 3,189; value, \$13,372; city property, \$1,380; money, etc., \$207; household furniture, \$3,156; watches, etc., \$87; farm and other animals, \$6,517; plantation and mechanical tools, \$1,165; value of all other property, \$105.00. Aggregate value of whole property, \$27,169.

The tax returns for 1901 show a gain of \$79,047 in the value of all property since the returns of 1900.

Population of Paulding county by sex and color, according to the census of 1900: white males, 5,846; white females, 5,778; total white, 11,624; colored males, 729; colored females, 616; total colored, 1,345.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 44 calves, 38 steers, 1 bull, 80 dairy cows, 21 horses, 17 mules, 4 donkeys, 4 sheep, 181 swine, 2 goats.

PICKENS COUNTY.

Pickens County was formed out of Gilmer and Cherokee in 1853, and was named for General Andrew Pickens, of South Carolina. It is bounded by the following counties: Gilmer on the north, Dawson on the east, Cherokee on the south, and Gordon on the west.

Mountain creek runs southward into the Etowah river, Talking Rock, northward into the Coosawattee. There is abundance of cool freestone water and the climate is bracing and healthy.

Along the watercourses and in the valleys the soil is fertile. The lands under good cultivation will yield to the acre: corn, 15 bushels; wheat, 12 bushels; oats, 15 bushels; rye, 10 bushels; barley, 8 bushels; Irish potatoes, 125 bushels; field-peas, 15 bushels; crab-grass hay, 2,000 pounds; corn fodder, 300 pounds; sorghum syrup, 100 gallons. Tobacco grows luxuriantly and to perfection, but not much acreage has so far been devoted to its cultivation. The finest cabbages and turnips are raised. This is true of every variety of vegetables. Apples do well, and the growing of the best varieties of peaches is becoming one of its great industries.

The largest orchards are those of Judge Gober, who has 125,000 peach-trees in this county.

In 1890 there were 2,527 sheep, from which were clipped 4,024 pounds of wool. Of the 3,760 cattle, 692 were working oxen and 1,254 were milch-cows producing 335,979 gallons of milk. The butter made on the farms amounted to 95,563 pounds, and the cheese to 50 pounds. Fifty-three thousand nine hundred and ten domestic fowls of all kinds gave 83,781 dozens of eggs. Sixteen thousand eight hundred and thirty-eight pounds of honey were gathered from the hives. There were 428 horses, 512 mules, 5 donkeys and 7,327 swine.

This county raised in 1899 1,851 bales of upland cotton.

Pickens county is noted for its great abundance of the finest marble, of which vast quantities are blocked out in the quarries and conveyed to Marietta over the Atlanta, Knoxville and Northern Railroad. Here it is put into shape and made ready for the market.

Jasper, the county site, so named to honor the memory of the celebrated Sergeant Jasper, is located on the Atlanta, Knoxville and Southern Railroad.

Other postoffices are Alice, Blaine, Burnt Mountain, Hinton, Jerusalem, Jockey, Ludville, McDaniel, Marble Hill, Mineral Springs, Nelson, Scare Corn, Talking Rock and Tate. At and near Tate are some of the richest marble quarries to be found in the United States.

At Alice is a cotton factory, the Harmony Mills, with 800 spindles and a capital of \$25,000.

The timber growth is that peculiar to this section of Georgia, viz.: the various kinds of oak, ash, poplar, hickory, chestnut and short-leaf pine.

The Methodists and Baptists have churches throughout the county. Other Christian denominations are represented, but not in as large numbers.

The schools belong to the public school system of Georgia, and number 32 for whites, with an average attendance of 939 pupils, and 3 for negroes with an average attendance of 66 pupils.

According to the United States census of 1900 the cotton ginned in this county in 1899 was 1,851 bales (upland).

The area of Pickens county is 219 square miles, or 140,160 acres. The population in 1900 was 8,641, an increase of 459 over that of 1890.

The school fund, according to the report of the Commissioner of Education, was \$6,109.32 in 1900.

The Comptroller-General's report for 1900 gives the following valuations: acres of improved land, 145,267; of wild land, 14,120; average price per acre of improved land, \$2.44; of wild land, \$0.32; city property, \$47,555; money and solvent debts, \$143,633; merchandise, \$36,484; cotton manufactories, \$10,010; iron works, \$6,690; amount invested in mining by citizens of the county, \$50.00; value of household furniture, \$42,669; farm and other animals, \$81,742; plantation and mechanical tools, \$17,964; watches, jewelry, etc., \$2,255; value of all

other property, \$85,586; real estate, \$406,737; personal estate, \$433,691. Aggregate value of all property, \$840,428.

Property returned by colored taxpayers: number of acres, 992; value, \$1,986; city property, \$255; money, etc., \$1,268; household furniture, \$983; farm and other animals, \$968.00; plantation and mechanical tools, \$134.00; value of all other property, \$62.00. Aggregate value of whole property returned by colored taxpayers, \$5,608.

The tax returns for 1901 show a decrease in the value of all property since the returns of 1900, amounting to \$21,222.

Population of Pickens county by sex and color, according to the census of 1900: white males, 4,058; white females, 4,168; total white, 8,226; colored males, 197; colored females, 218; total colored, 415.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 90 calves, 13 steers, 4 bulls, 176 dairy cows, 108 horses, 30 mules, 448 swine, 6 goats.

PIERCE COUNTY.

Pierce County was formed from Appling and Ware counties in 1857, and was named for Franklin Pierce, of New Hampshire, the fourteenth president of the United States. The counties bounding it are: Appling on the north, Wayne and Charlton on the east, Charlton on the south, Ware on the west and Appling for a very short distance on the north-west corner. Little Satilla river flows along the northern and half of the eastern boundary. Big and Little Hurricane creeks, uniting their waters, empty into the Satilla, which flows from west to east through the county. It is a well watered county and the soil, under careful culture, can make per acre: corn, 25 bushels; oats, 20; Irish and sweet potatoes, 100 bushels each; field-peas, 10; ground-peas, 50; seed cotton, sea-island, 1,000 pounds; crab-grass hay, 4,000 pounds; corn fodder, 400 pounds; sugar-cane syrup, 500 gallons.

The soil is especially adapted to the sugar-cane. Crab-grass produces good hay and can be made to produce far more than the average given above. As there is hardly any need for housing stock in the winter the grass is mostly used for pasturage. In 1890 the 5,772 sheep of this county gave a wool-clip of 10,202 pounds. Of 10,863 cattle, 3,115 milch-cows yielded 149,837 gallons of milk. The amount of butter made on farms was small, being only 13,124 pounds. There was of all varieties of poultry an aggregate of 33,733, and their eggs numbered 53,150 dozens. The production of honey was 17,723 pounds. There were 819 horses, 274 working oxen, 140 mules and 13,162 hogs in Pierce county.

There is an abundant supply of peaches, pears and tomatoes to give employment to the canning factory. There is a guano factory, a cotton seed oil-mill and a lumber manufacturing company, which finds a plentiful supply of material to work upon in the abundant forest growth of the county. Rosin, turpentine and lumber are shipped from this county to Savannah in great quantities every year. The annual output of sawn

lumber averages 15,000,000 feet, and the turpentine farms produce 15,000 barrels of naval stores. While the supply of hardwoods is by no means so great as that of yellow pine, yet there is a considerable quantity of hickory, oak, black-gum, cypress, poplar and maple.

Blackshear, the county site, on the Alabaha, the middle branch of Satilla river, is located on that branch of the Savannah, Florida and Western (of the Plant system), which runs in an air line from Waycross to Savannah. Another branch of the same road runs across the middle of the county to Brunswick, while another branch of the same system runs through the southern section in a southeasterly direction to Jacksonville, Florida. Thus the people of Pierce county are well provided with facilities for freight and travel. Blackshear has several flourishing mercantile establishments and good banking facilities. The entire Blackshear district has a population of 2,802, of whom 876 live in the town. Other postoffices are Avant, Coffee, Exeter, Hoboken, Offerman, Mudge, Patterson and Schlatterville.

At Offerman the Southern Pine Company operates a circular saw-mill which turns out 50,000 feet of merchantable lumber in a day. The company has a short railroad of its own.

At Patterson there is a large cotton ginnery. Though but a small town, it sometimes ships 1,000 bales of sea-island or long-staple cotton, of which the county has fine crops.

At Blackshear there are the most complete cotton ginnery in the State, a large fertilizer manufactory and a sea-island cotton seed oil-mill.

Truck-farming is carried on in a very satisfactory manner. Two and three crops are gathered from the same land in a single year. The easy railroad connection with the seaports of Savannah, Brunswick and Jacksonville, make it possible to ship vegetables, fruits, melons and berries with perfect safety.

As an illustration of what can be done in Pierce county in the trucking business may be mentioned the case of Mr. Elijah Aspinwall, who cleared from one and a quarter acres \$151.95 in twelve months. On February 5th he planted Irish potatoes, using four barrels of seed. After paying for these, for fertilizers, for labor, cultivating and harvesting and cost of barrels, he gathered 52 barrels of first-class potatoes and five barrels of culls, making on his potatoes a net profit of \$93.85. On May 3d he planted corn and gathered 50 bushels, clearing \$39.60. Then on the same land he planted pea-vines and from them and the grass hay cleared \$18.50, a total on $1\frac{1}{4}$ acres \$151.95.

The schools belong to the public school system of Georgia. Methodists and Baptists are the leading denominations among both white and colored.

The area of Pierce county is 518 square miles, or 331,520 acres. Population of Pierce county in 1900, 8,100, an increase of 1,721 since 1890; school fund, \$6,406.99.

By the Comptroller-General's report for 1900 there are: acres of improved land, 273,706; of wild land, 131,229; average value per acre of improved land, \$1.64; of wild land, \$0.49; city property, \$160,085;

shares in bank, \$25,000; money, etc., \$188,854; merchandise, \$67,178; household furniture, \$76,392; farm and other animals, \$193,125; plantation and mechanical tools, \$24,559; watches, jewelry, etc., \$5,495; value of all other property, \$89,009; real estate, \$699,105; personal estate, \$674,686. Aggregate value of whole property, \$1,343,791.

Property returned by colored taxpayers: number of acres of land, 6,878; value, \$23,011; city property, \$5,575; money, etc., \$170; merchandise, \$53; household furniture, \$6,205; watches, etc., \$221; farm and other animals, \$7,234; plantation and mechanical tools, \$1,234; value of all other property, \$520.00. Aggregate value of whole property, \$45,319.

In Pierce county, according to the United States census of 1900, there were ginned 3,657 bales of sea-island cotton during the season of 1899-1900.

The average attendance in the public schools is 1,025 in the 39 schools for whites, and 164 in the 7 schools for colored pupils.

The tax returns for 1901 show a gain of \$232,860 in the value of all property since the returns of 1900.

Population of Pierce county by sex and color, according to the census of 1900: white males, 3,058; white females, 2,858; total white, 5,916; colored males, 1,232; colored females, 952; total colored, 2,184.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 9 calves, 31 steers, 5 bulls, 25 dairy cows, 13 horses, 5 mules, 184 swine, 18 goats.

PIKE COUNTY.

Pike County was laid out in 1822 and received its name in honor of General Zebulon M. Pike, of New Jersey, who, in a victorious assault upon York (now Toronto) in Canada, on the 25th of April, 1813, was mortally wounded by the explosion of a British mine.

Pike county has Spalding county on the north, Monroe on the east, Upson on the south, and Meriwether on the west. The Flint river runs along its whole western border. Big Potato creek, coming down from Spalding county, runs from north to south through the eastern part of Pike, and entering Upson empties into Flint river on the southern border of the last named county. Other streams are Elkins, Birch, Flat Gap, Honey Bee, Sunday, Wasp, Fly and Rose creeks.

The general character of the soil is metamorphic, with rolling red clay lands, interspersed with a gray, gravelly soil. Taking all the lands of the county, the average production to the acre under ordinary methods of cultivation is: corn, 10 bushels; wheat, 10 bushels; oats, 12 bushels; Irish and sweet potatoes, 75 bushels each; rye, 10 bushels; field-peas, 7 bushels; sugar-cane, 100 gallons; sorghum, 75 gallons; crab-grass hay, 2,000 pounds; seed cotton, 700 pounds. But among those who use the better systems of cultivation the average production to the acre is: corn, 20 bushels; oats, 30; wheat, 15; rye, 12; field-peas, 15;

ground-peas, 40; Irish and sweet potatoes, 125 each; seed cotton, 1,000 pounds; crab-grass hay, 4,000 pounds; sugar-cane syrup, 350 gallons; sorghum syrup, 100 gallons. Some individual farms go ahead of these results. The soil is well adapted to Bermuda and crab-grass, to peavines, to all varieties of millets, and swamp grasses. Bermuda and swamp grasses are used for summer pasturage, and cane for winter.

In addition to milk and butter produced on the ordinary farms are the products of two successful dairy cows. Jerseys and a mixed breed of the Jersey and the common stock are much used in this county. Cotton seed meal and hulls with native forage are regarded as foods producing the best results. Much more attention than formerly is being paid by the people of Pike county to the rearing of beef cattle and improvement of the breed, and their stock is remarkably free from disease.

In 1890 there were in Pike county 123 sheep, with a wool-clip of 502 pounds; 4,555 cattle, 183 working oxen, 1,781 milch-cows, 732 horses, 1,975 mules, 2 donkeys, 6,958 swine and 72,320 of all the varieties of poultry. Among the farm products are 521,807 gallons of milk, 172,197 pounds of butter, 114 pounds of cheese, 104,074 dozens of eggs, and 24,281 pounds of honey. Of course, there are the usual garden products, and of these some \$6,000 worth are sold over and above the home consumption. There are 67,120 peach-trees and 7,203 apple-trees. About 500 acres were devoted in 1900 to the raising of melons, but the people complain that their profits were much reduced by high freight rates. There are 500 vineyards, covering in all 2,000 acres. Twenty-five per cent. of the grapes are sold, and from 40 per cent. of them wine is made.

The timber products are the usual hardwood growths and some short-leaf pine. About 8 steam sawmills are busy cutting out the timber and preparing it for use in building and general woodwork. The annual output of the timber products is about \$6,000. From the Pine Mountains in the southern part of the county have come great quantities of lumber and shingles.

There are good water-powers on tributaries of the Flint and Ocmulgee rivers. On the former 288 horse-powers are used by flour and grist-mills, and on the latter 56 horse-powers are utilized. Four thousand two hundred and fifty-five gross unutilized horse-powers of the Flint river are shared by Pike and Meriwether counties. There are altogether 7 flour-mills and about 25 grist-mills for corn. Some three or four use steam.

There are located at Barnesville three firms manufacturing wagons and buggies, and turning out 75 or more vehicles every month, selling even as far west as Arizona and New Mexico; one cotton-mill for spinning yarns, having 12,416 spindles and capital of \$120,000; 4 knitting-mills; 1 door, sash and blind factory and planing-mill, valued at about \$10,000; one shoe manufacturing company, and one Georgia Medicine Company. The knitting-mills make cotton and silk underwear of fine quality. At Williamson there is a cotton seed oil-mill.

Zebulon, the county site, is on a branch of the Southern Railway, running from Fort Valley to Atlanta. It has a court-house and jail, a hotel, 2 churches, Baptist and Methodist; a good high school and several stores.

Barnesville, with a population of 3,036 in the corporate limits, or 4,917 in the whole district, is one of the most progressive of the many thriving small cities of Georgia, located on the main line of the Central of Georgia, between Macon and Atlanta. It has a good hotel, 2 banks with a capital of \$60,000, many successful mercantile establishments and Gordon Institute, one of the best high schools for boys and girls in the State. For the boys the military feature is added, and the Gordon Institute cadets have won many prizes for their good drill and soldierly appearance. The Methodists and Baptists have good churches with full membership. A branch of the Central connects Barnesville with Thomaston in Upson county.

Williamson is at the point where two divisions of the Southern Railway cross each other, the one running from Fort Valley to Atlanta, the other from Columbus to McDonough and thence to Atlanta.

At Molena, in the southwestern part of the county on the branch of the Southern, running between Columbus and McDonough, is a bank with a capital of \$25,000. Other postoffices are Milner, Liberty Hill, Concord, Jordan's Store, Lifsey and Hollonville.

The products of the county are marketed at Barnesville, Milner, Williamson, Concord, Molena, Neal, Meansville, and Zebulon, each located on one of the three lines of railroad traversing the county. About 20,000 bales of cotton are shipped from this county, the receipts and shipments being divided between these different points. So well supplied is the county with the very best railroad facilities, that little attention is paid to the county roads except in the immediate vicinity of Barnesville and some of the larger villages.

Pure freestone water is abundant, the climate delightful and the county healthy.

Public schools number 55. Schools for white and colored are separate, as is the case in every county of Georgia. The average attendance is 1,371 in the 33 schools for whites, and 879 in the 20 schools for colored pupils. Church privileges throughout the county are unsurpassed.

According to the United States census of 1900 there were ginned in this county 14,281 bales of upland cotton during the season of 1899-1900.

The area of Pike county is 294 square miles, or 188,160 acres. Population in 1900, 18,761, a gain of 2,461 since 1890; school fund, \$11,624.81.

By the Comptroller-General's report for 1900 there are: acres of improved land, 182,371; of wild land, 795; average value per acre of improved land, \$5.49; of wild land, \$0.72; city property, \$422,382; shares in bank, \$37,150; building and loan associations, \$600; money, etc., \$146,102; merchandise, \$95,540; stocks and bonds, \$6,000; cot-

ton manufacturing, \$208,050; iron works, \$70; household furniture, \$127,394; farm and other animals, \$166,312; plantation and mechanical tools, \$49,747; watches, jewelry, etc., \$8,338; value of all other property, \$51,217; real estate, \$1,525,589; personal estate, \$820,736. Aggregate value of whole property, \$2,346,325.

Property returned by colored taxpayers: number of acres, 3,421; value, \$19,256; city property, \$18,486; watches, etc., \$141; household furniture, \$12,504; farm and other animals, \$19,588; plantation and mechanical tools, \$39,116; value of all other property, \$1,100. Aggregate value of whole property, \$76,508.

The tax returns of 1901 show a gain of \$125,794 in the value of all property since the returns of 1900.

Population of Pike county by sex and color, according to the census of 1900: white males, 4,551; white females, 4,607; total whites, 9,158; colored males, 4,765; colored females, 4,838; total colored, 9,603.

Population of the city of Barnesville by sex and color, according to the census of 1900: white males, 738; white females, 857; total white, 1,595; colored males, 680; colored females, 761; total colored, 1,441.

Total population of Barnesville, 3,036.

Domestic animals in Pike county in barns and inclosures, not on farms or ranges, June 1, 1900: 91 calves, 9 steers, 1 bull, 189 dairy cows, 229 horses, 56 mules, 404 swine and 38 goats.

POLK COUNTY.

Polk County was formed in 1851, chiefly from Paulding, and was named for James K. Polk of Tennessee, the eleventh president of the United States. Its boundaries are as follows: Bartow and Floyd counties on the north, Paulding on the east and also south of a little corner of it, Haralson on the south, and the State of Alabama on the west. Euharlee, Cedar, Raccoon and Sweetwater creeks flow through the county, and the lands along their courses are very productive. The lands in Cedar valley, through which runs Cedar creek, are equal to the celebrated blue-grass lands of Kentucky. In many places this valley has the appearance of a river bottom.

The lands of Polk county, well cultivated, will yield to the acre: corn, 20 bushels; oats, 30; wheat, 15; rye, 10; barley, 25; Irish potatoes, 100; sweet potatoes, 50; field-peas, 15; ground-peas, 20; seed cotton, 800 pounds; crab-grass hay, 4,000 pounds; Bermuda grass hay, 4,000 pounds; corn fodder, 450 pounds; sorghum syrup, 100 gallons; sugar-cane syrup, 50 gallons. Some of the lands in Cedar Valley will double many of these products and more than double others. They are sufficiently level for all practical purposes and are well watered by springs and running streams. Even some of the hill-sides are equal to the valley lands in the production of clover and the cereals.

This is a good county for all farm stock. In 1890 there were 1,499 sheep producing 2,848 pounds of wool. Of 4,998 cattle there were 1,958 milch-cows yielding 562,836 gallons of milk, from which were made 194,870 pounds of butter. The domestic fowls of all

kinds were 78,476 in number, producing 127,534 dozens of eggs, and from the hives were collected 19,730 pounds of honey. There were 830 horses, 1,167 mules, 6 donkeys and 7,914 hogs. The working oxen numbered 378.

The forest growth is chiefly of the hardwoods peculiar to this section and some short-leaf pine.

Cedartown, the county site, is so named on account of the extent of the cedar growth in its vicinity. It is a growing little city, which nearly doubled in population between 1880 and 1890, and has, by the census of 1900, 2,823 inhabitants. The Cedartown district, which includes the city, contains 6,478 inhabitants. It is on the former Chattanooga, Rome and Southern Railway, now a branch of the Central of Georgia system, at the point where it is crossed by the East and West Railroad. The city has graded schools and good church buildings. The Methodists and Baptists are the leading denominations.

There are two cotton factories at Cedartown: the Cedartown Cotton Company, with 23,600 spindles, and a capital of \$350,000, and the Standard Cotton Mills with 10,000 spindles and a capital of \$100,000.

There are also the Josephine Mills, knitting and spinnig, with 3,000 spindles, and the Juanita Knitting Mills, employing 60 operatives. The sum total of these mills is 36,662 spindles, 1,070 operatives and a weekly pay-roll of \$4,650. A new company has been established with \$175,000 in hand for the erection of a new mill of 10,000 spindles. There are besides, a cotton seed oil-mill, an electric power cotton-gin, and an iron furnace, which pays out annually \$200,000 for ore, wages and everything needed for mining it.

Other postoffices in the county are Bussy, Daniels, Davittes, Esom Hill, Etna, Fish, Fullwood Springs, Grady, Greenway, Hamlet, Lake Creek, Oreville, Pasco, Priors, Rockmart, Seney, Young and Walthall.

The slate quarry near Rockmart yields an apparently inexhaustible supply of excellent slate for roofing. There is at Rockmart the Piedmont Institute, which is doing a splendid work for the boys and girls of that section of Georgia. The Rockmart district has 3,474 inhabitants, of whom 575 live in the town.

The public schools of the county have an average attendance of 1,094 in the 31 schools for whites, and 531 in the 17 schools for colored pupils. In the white schools of Cedartown are 350 pupils, and in the colored schools 35.

According to the census of 1900 there were ginned in Polk county 8,852 bales of upland cotton during the season of 1899-1900.

The area of Polk county is 292 square miles, or 186,880 acres. Population in 1900, 17,856, an increase of 2,911 since 1890; school fund, \$10,408.56.

By the Comptroller-General's report for 1900 there are: acres of improved land, 178,317; of wild land, 52,683; average price per acre of improved land, \$6.49; of wild land, \$0.75; city property, \$549,532; shares in bank, \$38,500; money, etc., \$219,688; stocks and bonds, \$300; merchandise, \$101,418; cotton manufactories, \$228,050; iron works,

\$30,500; in mining, \$14,100; household furniture, \$112,762; farm and other animals, \$170,355; plantation and mechanical tools, \$46,699; watches, jewelry, etc., \$9,735; value of all other property, \$53,810; real estate, \$1,746,584; personal estate, \$1,240,147. Aggregate value of whole property, \$2,986,731.

Property owned by colored taxpayers: number of acres, 9,152; value, \$31,804; city property, \$10,722; money, etc., \$296; merchandise, \$10; household furniture, \$8,402; watches, etc., \$207; farm and other animals, \$15,762; plantation and mechanical tools, \$3,138; value of all other property, \$988.00. Aggregate value of whole property \$71,023.

The tax returns for 1901 show a gain of \$463,630 in the value of all property since 1900.

Population of Polk county, by sex and color, according to the census of 1900: white males, 6,642; white females, 6,295; total white, 12,937; colored males, 2,556; colored females, 2,363; total colored, 4,919.

Population of Cedartown by sex and color, according to the census of 1900: white males, 1,044; white females, 1,023; total white, 2,067; colored males, 362; colored females, 395; total colored, 756.

Total population of Cedartown, 2,823.

Domestic animals in Polk county in barns and inclosures, not on farms or ranges, June 1, 1900: 111 calves, 57 steers, 2 bulls, 275 dairy cows, 184 horses, 2 donkeys, 392 swine, 225 goats.

PULASKI COUNTY.

Pulaski County was laid out from Laurens in 1808, and named in honor of Count Pulaski, a Polish nobleman who lost his life fighting for American liberty at Savannah on the 9th of October, 1779. This county is so shaped that it cannot be bounded in the usual way. The Ocmulgee river, entering on the western side, flows in a southeasterly direction, dividing the county into a northeastern and a southern section. The following counties bound it: Laurens on the northeast, and Twiggs on the northwest, Dodge on the southeast and east, Wilcox on the south, Dooly on the west, and Houston partly west and partly northwest. The lower part of the county is generally level; the upper or northeastern part, rolling.

About $\frac{1}{4}$ of the soil is red clay, the remainder a sandy loam. Those lands to the northeast of the Ocmulgee river are generally the best.

Under ordinary methods the average production to the acre for the county is: corn, 10 bushels; wheat, 8; oats, 15; field-peas, 8; ground-peas, 50; Irish and sweet potatoes, 100 bushels each; upland seed cotton, 500 pounds. But under improved methods of cultivation the production per acre will average: corn and oats, 20 bushels each; wheat, 12; rye, 6; Irish and sweet potatoes, 150 bushels each; field-peas, 15; ground-peas, 75; upland seed cotton, 600 pounds; crab-grass hay, 4,000 pounds; corn fodder, 200 pounds; sorghum syrup, 100 gallons; sugarcane syrup, 300 gallons.

A considerable amount of hay is raised from native grasses, crab,

crowfoot and Bermuda, and from the pea-vine and German millet. The native grasses are used for summer pasturage and rye for winter. Milk and butter are produced on all the farms, and there is one special dairy farm. Hitherto the improvement in beef cattle has been very limited, but more interest is now being manifested. Considerable improvement in stock is reported.

In 1890 there were in this county 928 sheep, yielding 1,918 pounds of wool; 6,146 cattle, 1,954 of these being milch-cows giving 257,707 gallons of milk. The production of butter was 57,727 pounds. Of all kinds of poultry the sum was 60,026, and they produced 86,938 dozens of eggs. The honey produced was 5,860 pounds. There were 950 horses, 1,594 mules, 1 donkey, 337 working oxen and 17,405 hogs.

There is a good supply of such game as quail and wild turkeys.

Several tributaries of the Ocmulgee, viz.: Little Ocmulgee river, Big and Reedy creeks water the county. They are well stocked with fish and afford good water-powers. In the neighborhood of Hawkinsville are about 260 horse-powers, some of which are utilized by grist-mills.

There are some 25,000 acres of original pine, and 20,000 acres in swamp lands, abounding in hardwoods suitable for manufacturing purposes. The annual output of lumber is 35,000,000 superficial feet at an average price of \$8 a thousand feet.

There is abundance of clay suitable for making brick. There is also limestone, but neither is being worked to any great extent.

There are in Pulaski county several manufacturing establishments, some in operation and others in process of construction. In Cochran are two variety works, and at Hawkinsville one barrel factory, with a capacity of 400 barrels a day, one carriage factory and one cotton seed oil-mill. There is one flour-mill, valued at \$3,000, also 12 grist-mills with an aggregate value of \$20,000; 13 sawmills with a total valuation of \$35,000. All these are operated by steam, with the exception of 4 grist-mills. There are also 2 turpentine distilleries. There are 2 cotton-mills, 1 at Hawkinsville, the other at Cochran, with 5,000 spindles and a capital of \$100,000 each; also a cotton seed-oil mill in Cochran. Near Hawkinsville is a vineyard of 30 acres, producing very fine grapes, which are used for the manufacture of wine. Twelve artesian wells add greatly to the healthfulness of Pulaski county.

On the dividing ridge between the piney woods to the south and the oak and hickory lands to the north, is Hawkinsville, the county site, with a population of 2,103, located on the southwest side of the Ocmulgee river. The Hawkinsville district, which includes the town, has 4,104 inhabitants. A short branch railroad of the Southern Railway connects it with Cochran on the main line of that system, running between Macon and Brunswick. The Wrightsville and Tennille Railroad gives Hawkinsville a connection at Tennille with the Central of Georgia to Savannah, and with another branch of the Southern to Augusta. Still another road connects Hawkinsville with the Georgia Southern and Florida at Worth. Hawkinsville has besides, a line of steamboats

on the Ocmulgee and Altamaha rivers to Darien and thence to Brunswick. There are at Hawkinsville two banks with a capital of \$50,000 each, a court-house worth \$30,000; six life and fire insurance agencies, an ice factory and an electric light plant in full operation. There are in Hawkinsville Methodist, Baptist and Episcopal churches. The Presbyterians also are well represented. Throughout the county Methodists and Baptists predominate. Public and private schools abound in town and country. The average attendance in the public schools is 812 in the 36 schools for whites and 776 in the 21 for colored. In the white schools of Hawkinsville are enrolled 250 pupils, and in the colored schools 150.

Cochran has a bank with a capital of \$25,000 and three life and fire insurance agencies. The Cochran district contains 2,385 inhabitants, 1,531 of this number are in the corporate limits of the town.

The products of Pulaski county are marketed in Hawkinsville, Cochran and Macon. Of the 25,000 bales of cotton received and shipped from the county 11,000 are handled at Hawkinsville. According to the United States census of 1900 there were ginned in Pulaski county 16,431 bales of upland cotton during the season of 1899-1900.

The area of Pulaski county is 477 square miles, or 305,280 acres.

Population in 1900, 18,489, an increase of 1,930 since 1890; school fund, \$11,368.99.

By the Comptroller-General's report for 1900 there are: acres of improved land, 281,949; of wild land, 11,199; average price per acre of improved land, \$3.12; of wild land, \$1.87; city property, \$434,443; shares in bank, \$100,000; money, etc., \$178,517; merchandise, \$135,847; stocks and bonds, \$6,000; shipping and tonnage, \$1,025; cotton manufactories, \$8,200; household furniture, \$133,477; farm and other animals, \$202,733; plantation and mechanical tools, \$48,183; watches, jewelry, etc., \$9,563; real estate, \$1,335,514; personal estate, \$991,743; value of all other property, \$52,952; aggregate value of property, \$2,227,257.

Property returned by colored taxpayers: Number of acres of land, 13,205; value, \$45,321; city property, \$28,306; money, etc., \$762; merchandise, \$222; household furniture, \$24,027; watches, etc., \$387; farm and other animals, \$30,291; plantation and mechanical tools, \$6,991; value of all other property, \$2,493; aggregate value of property, \$138,800.

The tax returns for 1901 show a gain of \$151,726 in the value of all property since the returns of 1900.

Population of Pulaski county by sex and color, according to the census of 1900: white males, 3,758; white females, 3,702; total white, 7,460; colored males, 5,489; colored females, 5,540; total colored, 11,029.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 91 calves, 45 steers, 1 bull, 166 dairy cows, 163 horses, 94 mules, 1 donkey, 439 swine, 8 goats.

PUTNAM COUNTY.

Putnam County was laid out in 1807, and named for General Israel Putnam, of Massachusetts, one of the New England Revolutionary heroes. It is bounded on the north by Morgan county, on the northeast by Greene, on the southeast by Hancock, on the south by Baldwin and Jones, and on the west by Jasper. Along its whole eastern border flows the Oconee river, and through the western part of the county and along several miles of its southern boundary flows Little (or Little Oconee) river. Several creeks empty into these streams, viz.: Indian, Murder, Cedar, Roody, Crooked, Sugar and Lick creeks.

The character of the soil is metamorphic, red clay, rolling land, much of it mulatto or chocolate, underlaid by stiff, red clay subsoil. Some of it is a gray sandy loam. These lands, under good cultivation, will produce to the acre: corn, 20 bushels; oats, 25; wheat, 12; rye, 6; barley, 20; Irish potatoes, 75; sweet potatoes, 100; field peas, 10; ground peas, 25; seed cotton, 800 pounds; crab-grass and Bermuda grass hay, 4,000 pounds each; sorghum syrup, 60 gallons; sugar cane syrup, 100 gallons. Under ordinary methods the yields of all crops are not so good as the above. More attention is paid each succeeding year to forage crops and the grasses.

Bermuda and the native grasses furnish grazing until mid-winter, and, if that season does not prove severe, until spring.

Not as much attention as formerly is given to the raising of beef cattle. The introduction of the Jersey has turned the attention of the farmers to dairy cattle. There are ten dairy farms which sell 50,000 pounds of butter annually with a profit of \$15,000. In 1890 there were in the county 4,793 cattle, 2,123 being milch-cows, of which about 300 were Jerseys and over 1,000 half breed and higher. There was a production on all farms of 610,247 gallons of milk and 181,111 pounds of butter. The honey gathered from hives amounted to 13,927 pounds. There were 46,031 domestic fowls and their eggs numbered 104,954 dozens. There were 864 sheep, with a wool-clip of 1,928 pounds; 645 horses, 1,975 mules, 2 donkeys, 117 working oxen and 7,935 swine. By a recent estimate there are 500 goats in the county.

The vegetables and melons raised are for home consumption, because other crops, being considered more profitable, receive the attention of the farmers.

Peaches and plums are raised for the markets, also some apples. The peach-trees number 36,670, the apple-trees 3,815. The plum and pear-trees number each about 3,000. There are two canning factories putting up each 100 cases a day.

There are ten vineyards aggregating 100 acres. About 20 per cent. of the grapes are sold in the markets and from 50 per cent. of them wine is made.

There remain in the county about 25,000 acres of original forest, the growth of which is short leaf pine, oak, hickory, gum, poplar and ash.

In many places the oaks are dying from bugs or worms boring into the trees near the roots. The annual output of timber products does not exceed \$4,000.

There are several varieties of granite, pronounced by competent authorities to be as good as any in the State.

Twelve miles from Eatonton are the Oconee Springs, the mineral properties of which are iron, magnesia and arsenic, considered very fine for stomach and other troubles.

On the Oconee and tributaries are 9 grist-mills, using 433 horse-powers. The gross horse-powers of the Oconee are 726; of the Little river, 237. There is one grist-mill operated by steam.

According to the United States census of 1900 there were ginned in Putnam county 9,609 bales of upland cotton for the season of 1899-1900.

Eatonton, the county site, is a beautiful little city of 1,823 inhabitants, with pretty groves and nicely shaded streets. The Eatonton district, which includes the city, contains a population of 2,491. It has a court-house valued at \$20,000, two banks with a capital of \$60,000 each, a good hotel, several prosperous mercantile establishments, five life and fire insurance agencies, good church buildings of Methodists, Baptists and Presbyterians, graded schools and an elegant public school building, and water works owned by the city. There is at Eatonton a shoe factory with a capacity of 500 pairs of shoes in a day. There are now being constructed in the vicinity of Eatonton three cotton-mills: The Middle Georgia, valued at \$125,000; the Electric Cotton Mill, valued at \$65,000; the Quintet Cotton Mill, valued at \$25,000. When these mills are completed, they will consume 6,500 bales of cotton annually. The cotton receipts and shipments from Putnam county amount to about 15,000 bales, of which Eatonton handles 12,000.

There are in Putnam county 16 schoolhouses for whites, with an average attendance of 546 pupils, and 25 for colored, with an average attendance of 608 pupils.

The churches of the county for the whites are 10 Methodist, 10 Baptist, 1 Presbyterian. There are 5 for colored Methodists and 7 for colored Baptists.

A branch of the Central of Georgia Railroad passes through Eatonton, connecting that place with Atlanta, Macon, Covington, Milledgeville and Savannah. The public roads of Putnam county are among the best in all that section of Georgia.

Eatonton was named for General Wm. Eaton, of Connecticut, who was greatly distinguished in the war with the Tripolitan pirates in 1805.

Other postoffices in the county are: Clopton, Nona, Note, Spivey, Stanfordville and Willard.

The area of Putnam county is 348 square miles, or 222,720 acres. Population in 1900, 13,436, a loss of 1,406 since 1890; school fund, \$11,368.99.

By the Comptroller-General's report for 1900 there are: acres of improved land, 207,767; average value, \$4.51; city property, \$279,270;

shares in bank, \$109,800; money, etc., \$202,106; value of merchandise, \$61,395; stocks and bonds, \$1,800; household furniture, \$60,562; farm and other animals, \$121,794; plantation and mechanical tools, \$37,005; watches, jewelry, etc., \$5,958; value of all other property, \$3,178; real estate, \$1,214,483; personal estate, \$605,428; aggregate property, \$1,819,911.

Property returned by colored taxpayers: Number of acres, 5,446; value, \$24,590; city property, \$16,670; money, etc., \$500; merchandise, \$65; household furniture, \$5,310; farm and other animals, \$23,338; plantation and mechanical tools, \$4,055; aggregate value of property, \$74,528.

Six miles southwest of Eatonton is a mound composed of quartz rock of different varieties. Upon it there is a vestige of an ancient wall nearly circular and embracing 110 feet.

The tax returns for 1901 show a gain of \$51,206 in the value of all property since the returns of 1900.

Population of Putnam county by sex and color, according to the census of 1900: white males, 1,726; white females, 1,653; total white, 3,379; colored males, 4,834; colored females, 5,223; total colored, 10,057.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 80 calves, 10 steers, 59 dairy cows, 42 horses, 5 mules, 116 swine, 1 goat.

QUITMAN COUNTY.

Quitman County was formed from Randolph and Stewart in 1858, and was named for General John A. Quitman, of Mississippi, who was distinguished in the war with Mexico. It is bounded on the north by Stewart and a corner of Randolph, on the east by Stewart and Randolph, on the south by Clay and a corner of Randolph, and on the west by the State of Alabama, from which it is separated by the Chattahoochee river. Two large creeks, Big Potato and Houchooke and several smaller ones empty into the Chattahoochee.

The soil belongs to the tertiary formation, and is in the main a gray, sandy loam and clay subsoil, with some mulatto, and some stiff black bottom and hummock land on the river and creeks. It is varied in character and productiveness. The average yield by the acre is: corn, 10 bushels; wheat, 10; oats, 12; rye, 8; Irish and sweet potatoes, 100 each; field-peas, 10; ground-peas, 50; chufas, 50; rice, 50; seed cotton, 540 pounds; hay from crab, Bermuda or Johnson grass, 5,000 pounds; sugar-cane syrup, 186 gallons. But some of the best lands report yields as follows: Corn, 40 to 60 bushels to the acre; wheat, anywhere from 20 to 75 bushels; oats, 40 bushels; rye, 50 bushels; field-peas, 15 bushels; ground-peas and chufas, 100 bushels each; rice, 60 bushels; Irish and sweet potatoes, 200 bushels; seed cotton, 1,000 pounds; hay from crab, Bermuda or Johnson grass on river and creek bottoms, 14,000 to 16,000 pounds; sugar-cane syrup, 315 gallons. Some report the largest yield of sweet potatoes as high as 300 bushels to the acre. Although

hay does well, it is reported that only a few raise it. Notwithstanding the great possibilities of the soil, many of the farmers raise all cotton and buy their corn. But others diversify their crops and find it much the better plan. Some, who raise cattle on a large scale, find it very profitable.

By the census of 1890 there were in Quitman county 1,889 cattle, including 576 milch-cows, over half of the cows being improved breeds, and a fair percentage of pure breed. There was a production of 131,493 gallons of milk, 39,094 pounds of butter and 30 pounds of cheese. The production of honey was 9,535 pounds. The number of all kinds of poultry was 19,280, and their eggs numbered 37,049 dozens.

There were 270 sheep, with a wool-clip of 380 pounds, 265 horses, 557 mules, 4 donkeys, 131 oxen and 2,881 swine. By a recent estimate there were 50 goats in the county.

There is very little game in the county, but very good fishing in the river and creeks.

The timber products are not extensive; about one-fourth of the original forest still standing. There is about 2 per cent. of yellow pine, the rest being the various kinds of oak, hickory, chestnut, beech, gum, etc. Of the 4 small sawmills 2 are run by water and 2 by steam. The total value of the timber products is about \$5,000 a year. There are two small flour-mills and four grist-mills in this county. The total of all manufactories is 10, with an annual output of about \$40,000. The unutilized water-powers of the Chattahoochee river and tributaries are 117 horse-powers.

Vegetables, berries, fruits and melons are raised for home consumption. Not more than \$1,000 worth are sold annually.

The county site is Georgetown on a branch of the Central of Georgia Railroad, which connects it with Cuthbert, Dawson, Albany and Americus. The Chattahoochee river affords water transportation, and steamboats run all the year from Columbus to Apalachicola, on the Gulf of Mexico.

The county roads are in good condition. The products of the county are marketed in Georgetown, Ga., and in Eufaula, Ala. Of about 7,000 bales of cotton from the county over 5,000 are handled at Georgetown. According to the United States census of 1900, there were ginned in this county 6,243 bales of upland cotton during the season of 1899-1900.

Other stations on the railroad are Hatcher and Morris, each doing a fair share of business.

There are some 20 schools in the county. The average attendance is 150 in 9 schools for whites, and 281 in 11 schools for colored.

Baptists and Methodists are the prevailing religious denominations.

The area of Quitman county is 152 square miles, or 97,280 acres.

Population in 1900, 4,701, a gain of 230 since 1890; school fund, \$2,963.65.

By the Comptroller-General's report for 1900 there are: acres of im-

proved land, 98,229; value per acre, \$3.12; city property, \$21,315; money, etc., \$36,940; merchandise, \$11,115; household furniture, \$26,733; farm and other animals, \$54,898; plantation and mechanical tools, \$9,028; watches, jewelry, etc., \$1,664; value of all other property, \$8,818; real estate, \$327,747; personal estate, \$153,541; aggregate value of property, \$481,288.

Property returned by colored taxpayers: Number of acres, 1,907; value, \$6,304; city property, \$880; household furniture, \$1,547; watches, etc., \$42; farm and other animals, \$7,505; plantation and mechanical tools, \$1,462; value of all other property, \$370; aggregate property, \$21,110.

The tax returns for 1901 show a gain of \$23,490 in the value of all property since the returns of 1900.

Population of Quitman county by sex and color, according to the census of 1900: white males, 601; white females, 653; total white, 1,254; colored males, 1,689; colored females, 1,758; total colored, 3,447.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 19 calves, 12 steers, 40 dairy cows, 7 horses, 12 mules, 55 swine.

RABUN COUNTY.

Rabun County was laid out in 1819, and was named in honor of William Rabun, Governor of Georgia from November, 1817, to October 25th, 1819, when he died. A part of Habersham was added to it in 1828. It is bounded on the north by the State of North Carolina, east and southeast by the State of South Carolina, south by Habersham county, and west by Towns county. The Chattooga river separates it from the State of South Carolina. The Little Tennessee, one of the headwaters of the great river of that name, rises among the mountains in the central part of the county and flows northward into North Carolina. The Tallulah river rises in the northwest of the county, flows southward, then turns for a while toward the west, then to the southeast until it unites with the Chattooga to form the Tugaloo, one of the headwaters of the Savannah river.

About ten miles above the junction of the Tallulah with the Chattooga are the noted Falls of Tallulah, a description of which can be found in the general sketch. The Tallulah river runs for a short distance along the southern boundary of Rabun county. Other streams are War Woman, Tigertail, Wild Cat, Stecoa, Persimmon and Mud creeks. This is a county of mountains, and from every direction there are presented to the eye ridges of mountains, one behind the other. Some of the peaks are Bald Mountain, Screamer, Pinnacle and Tallulah. On the mountains are found wild turkeys, deer and some bears. The streams abound in mountain trout. There are several valleys, Tennessee, War Woman, Persimmon, Tigertail and Simpson. On all the water courses are bodies of fine lands, but so hemmed in that one traveling in a vehicle can reach them only by circuitous routes.

The soils are varied, black loam, chocolate and alluvial, all producing good crops except of cotton. The average yield per acre of the various crops is: corn, 20 bushels; oats and rye, 15 each; wheat, 10; rice, 15; field-peas and ground-peas, each 15; Irish potatoes, 200; sweet potatoes, 150; sorghum syrup, 100 gallons. Clover, Bermuda and all grasses do well, and afford good pasturage for about five months of the year. All kinds of vegetables do well. White head cabbages grow to enormous size, and from them is made fine sauerkraut. The apples of this county are very fine, and keep through the entire winter.

More interest is taken in the improvement of stock than at any previous time. Within the last year a number of bred stock have been imported, but there are no data by which to determine the number.

By the census of 1890 there were in the county 5,671 sheep, with a wool-clip of 9,209 pounds; 4,633 cattle, 785 working oxen, 1,368 milch-cows, 474 horses, 435 mules, 9 donkeys and 7,717 swine. It is estimated that there are in the county 100 goats.

Among the farm products were 300,029 gallons of milk, 69,992 pounds of butter, 110 pounds of cheese, 12,357 pounds of honey, 36,489 domestic fowls of every kind and 48,892 dozens of eggs.

There are over 200,000 acres of original forest, hardwoods of all varieties and pine, but 75 per cent. cannot be profitably marketed at present for lack of good shipping facilities. There are 5 sawmills, but the output of timber is small.

The county has 25 flour and grist-mills. The water-powers are extensive, but exact data not attainable.

The mineral products are gold, copper, mica, asbestos and sandstone. Iron, carbonate of iron and alum are found. On Persimmon creek Powell, Stoneciphers and Smith mines have been operated with considerable profit. There are now (1900) 5 mines and quarries in operation, employing about 200 hands.

Clayton, situated in about the center of the county at the foot of the Blue Ridge, is the county site. It was named in honor of Judge A. S. Clayton.

There are 9 Methodist and 20 Baptist churches in the county.

The public schools number 39 and have an average attendance of 1,101 in 37 schools for whites, and 30 in the 2 schools for colored.

There is one establishment for the manufacture of telephone and telegraph pine.

The products of this county are marketed at Tallulah Falls, Clayton and Atlanta. There is only one-half of a mile of railroad in this county, the Tallulah Falls Railroad, which runs through Habersham county to Cornelia on the Southern Railway.

The area of Rabun county is 344 square miles, or 220,160 acres.

Population in 1900, 6,285, an increase of 679 since 1890; school fund, \$4,453.07.

By the Comptroller-General's report for 1900 there are: acres of improved land, 202,513; of wild land, 59,688; average price per acre of improved land, \$1.25; of wild land, \$0.22; city property, \$33,510;

money, etc., \$55,684; merchandise, \$10,965; cotton manufactories, \$300; household furniture, \$23,637; farm and other animals, \$81,530; plantation and mechanical tools, \$10,220; watches, jewelry, etc., \$1,020; value of all other property, \$14,945; real estate, \$300,490; personal estate, \$201,849; aggregate of property, \$502,339.

Property returned by colored taxpayers: Number of acres, 914; value, \$930; money, etc., \$350; household furniture, \$253; farm and other animals, \$766; plantation and mechanical tools, \$109; value of all other property, \$35; aggregate property, \$2,449.

The tax returns for 1901 show a gain of \$8,287 in the value of all property since the returns of 1900.

Population of Rabun county by sex and color, according to the census of 1900: white males, 3,036; white females, 3,068; total white, 6,104; colored males, 87; colored females, 94; total colored, 181.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 3 calves, 1 steer, 9 dairy cows, 4 horses, 18 swine, 8 goats.

RANDOLPH COUNTY.

Randolph County was laid off from Lee in 1828. A part of it was given to Stewart in 1830. It was named in honor of John Randolph, of Virginia, for many years a Representative in Congress and then Senator from his native State. It is bounded on the north by Stewart and Webster counties. An eastern projection has Terrell on the north, while a western projection has Quitman on the north. Terrell county is on all the rest of its eastern border, while Clay and Quitman counties bound it on the west. It is bounded on the south by Calhoun and Clay counties.

It is watered by creeks tributary to the Chattahoochee and the Flint. The chief one flowing into the Chattahoochee is Pataula. The Pachitla and Fushachee flow south from the Ichawaynochaway, which empties into the Flint river.

This is an excellent county. The people give a great deal of attention to fruit. Vegetables of every variety are raised, and between \$7,000 and \$8,000 worth are marketed annually. Almost every family raises them for home consumption. Very fine melons are raised, almost exclusively for home use. Only a few farmers pay any attention to the cultivation of hay, but those who do, find it very profitable. They generally raise the crowfoot and crab grasses with peas and harvest them together.

The soil belongs to the tertiary formation. It is generally gray with a red clay subsoil. There are outcroppings of red surface subsoil in the northern and eastern parts of the county. It is an elevated region, with lands for the most part slightly rolling. The average production to the acre on these lands is: corn, 10 bushels; oats, 12 bushels; wheat, 8 bushels; rye, 6 bushels; Irish potatoes, 60 bushels; sweet potatoes, 200 bushels; cow-peas, 5 bushels; ground-peas, 10 bushels; rice, 40 bushels (upland); sugar-cane syrup, 300 gallons; seed cotton, 600 pounds; hay from

crowfoot and crab-grass and peavines, harvested together, 3,000 pounds. Under the best methods of cultivation the average of nearly all these crops is greatly increased.

There are in Randolph county 85,000 peach-trees, 6,000 plum-trees and 1,200 apple-trees.

More attention than ever before is being paid to the improvement of the breeds of both dairy and beef cattle. In 1890 the county had 4,829 cattle, of which 1,860 were milch-cows. About one-fifth of the cows were of improved breeds, a fair percentage being of pure blood. There were 258 working oxen, 992 horses, 1,492 mules, 13 donkeys, 14,425 swine and 57,467 domestic fowls of all varieties.

Among the farm products are 317,045 gallons of milk, 75,472 pounds of butter, 180 pounds of cheese, 107,667 dozens of eggs and 28,623 pounds of honey; 185 sheep gave 194 pounds of wool.

About 60,000 acres of original forest trees are still standing. These embrace ash, maple, poplar and yellow pine, all available for the market. Some of these are being sawed every year, and the annual output is about \$6,000 worth, or 1,000,000 superficial feet at \$6 a thousand feet.

On tributaries of the Flint river are 6 grist-mills using 84 horse-powers, and on a tributary of the Chattahoochee (Pataula creek) is 1 mill using 8 horse-powers. The unutilized gross horse-powers are on Roaring Branch, 14; on Wakefortsee creek, 5.

The total output of all manufactories in the county is \$24,860.

Two establishments are engaged in cultivating flowers and flowering plants for the market.

Cuthbert, the county site, was named for Hon. J. A. Cuthbert, who had represented Georgia in the United States Senate, and who died in Mobile, Ala., at a very advanced age. This is a live little city at an elevation of 446 feet above sea level, having a population of 2,641. The Cuthbert district, which includes the town, has 4,461 inhabitants. It is located on a branch of the Central of Georgia Railroad running between Smithville and Georgetown. A short distance from Cuthbert is the junction of this road with another branch of the same system, running to Fort Gaines. The Methodists, Baptists and Presbyterians have good church buildings and a full membership at Cuthbert. There is here a good system of schools, and the Methodists have a fine institution for the education of young ladies, Andrew Female College. An excellent Baptist school is also here, Bethel Male College.

Shellman, on the same railroad, has also good schools and church buildings. There are also many Episcopalians in Randolph county.

The public schools in Randolph county number 27 for whites and 24 for colored pupils. The average attendance of white children is 1,000, of colored 990.

Cuthbert has one bank with a capital of \$50,000. Shellman has two banks with a combined capital of \$85,000.

The court-house at Cuthbert was built in 1885 at a cost of \$23,000.

Cuthbert has a good system of water works, also electric lights, two grist-mills and two gins.

Other postoffices are Coleman, Springvale and Benevolence.

The products of the county are marketed at Cuthbert, Shellman and Coleman.

The total receipts and shipments of cotton are 22,000 bales, of which Cuthbert handles from 12,000 to 15,000 bales annually, Shellman about 8,000 and Coleman 2,000. According to the census of 1900 there were ginned in Randolph county 18,558 bales of upland cotton during the season of 1899-1900.

Among the industries of Cuthbert there are: the Randolph Cotton Mills, a carriage factory, machine works, ice factory and factories for making spokes, hoops, handles, barrels, buckets, brooms and soap.

In Shellman and neighborhood are three sawmills, and the town has a good retail business.

The area of Randolph county is 476 square miles, or 304,640 acres.

Population of Randolph county in 1900, 16,847, a gain of 1,580 since 1890; school fund, \$12,963.80.

By the Comptroller-General's report for 1900 there are: acres of improved land, 261,253; of wild land, 202; average value per acre of improved land, \$3.55; of wild land, \$0.25; city property, \$349,185; shares in bank, \$39,500; money, etc., \$178,475; merchandise, \$94,305; iron works, \$1,200; household furniture, \$97,165; farm and other animals, \$170,380; plantation and mechanical tools, \$40,090; watches, jewelry, etc., \$6,940; value of all other property, \$40,720; real estate, \$1,277,830; personal estate, \$680,405; aggregate value of property, \$1,958,235.

Property returned by colored taxpayers: Number of acres, 8,777; value, \$30,955; city property, \$28,810; money, etc., \$40; merchandise, \$310; household furniture, \$42,300; watches, etc., \$210; farm and other animals, \$16,985; plantation and mechanical tools, \$4,355; value of all other property, \$1,045; aggregate property, \$95,010.

The tax returns for 1901 show a gain of \$61,480 in the value of all property since the returns of 1900.

Population of Randolph county by sex and color, according to the census of 1900: white males, 2,699; white females, 2,851; total white, 5,550; colored males, 5,458; colored females, 5,839; total colored 11,297.

Population of the city of Cuthbert, by sex and color, according to the census of 1900: white males, 410; white females, 460; total white, 870; colored males, 811; colored females, 960; total colored, 1,771.

Total population of Cuthbert, 2,641.

Domestic animals in Randolph county in barns and inclosures, not on farms or ranges, June 1, 1900: 37 calves, 7 steers, 1 bull, 81 dairy cows, 116 horses, 26 mules, 260 swine, 1 goat.

RICHMOND COUNTY.

Richmond County was known in the old colonial days as St. Paul's Parish. The first settlement was at Augusta, which was named by Oglethorpe in honor of one of the royal princesses. It was laid out in 1735 by the trustees of the then infant colony of Georgia, and garrisoned in 1736. Several warehouses were built here for the Indian trade. The Savannah river furnished water transportation, the best known in that day. As steamboats were unknown at that time, long boats propelled by poles made four or five voyages a year to Savannah, from whence their contents were transferred to vessels that carried them to Charleston. In 1777, while the newly proclaimed States were fighting for independence, St. Paul's Parish was made the county of Richmond, being so called in honor of the Duke of Richmond, who in Parliament and on all occasions championed the cause of American independence. In 1790 a part of Richmond county was set off to Columbia.

Richmond county is bounded on the northeast and east by the State of South Carolina, on the south by Burke and Jefferson counties, on the western side along a straight line running from northeast to southwest by Columbia and McDuffie counties. The Savannah river separates it from the State of South Carolina. Brier creek runs across the southwestern part of the county, and after flowing through Burke and Screven empties into the Savannah. Butler's creek, about seven miles below Augusta, empties into the Savannah river. Other streams tributary to the Savannah are: McBean's, Spirit and Rae's creeks.

The soil over three-fourths of the county belongs to the tertiary formation, and is of a light sandy loam, easily worked and well adapted to truck farming. Along the streams the soil consists of alluvial and hummock land. In the western part of the county it is dry and sandy, unproductive and covered with a growth of "black jack," oak and yellow pine. The northern part of the county is high and rolling, with red clay and gravelly soil, covered with hardwood growth and short-leaf and yellow pine. The alluvial lands of the Savannah river are of unsurpassed fertility, and are especially adapted to corn, hay and the small grains.

The average production to the acre of the lands in this county is: corn, 11 bushels; oats, 17 bushels; wheat, 6 bushels; field-peas, 10 bushels; ground-peas, 15 bushels; seed cotton, 576 pounds to the acre; hay, made from Bermuda, crab and Guinea grasses, peavines and vetch, 2,800 pounds; sugar cane syrup, 70 gallons; Irish potatoes, 180 bushels; sweet potatoes, 300 bushels. On some of the lands there are yields far ahead of these averages. There have been produced as high as 800 bushels of sweet potatoes to the acre by some of the truck farmers. There can be grown 60 bushels of corn and 8,000 pounds of hay to the acre on the alluvial lands.

The truck sold in the county amounts to \$85,000.

The melons are celebrated for their size and quality.

Augusta is one of the most noted melon markets in the United States.

This county has 38,607 peach-trees, 8,617 apple-trees, 5,032 plum-trees, 2,622 pear-trees and 1,343 cherry-trees. Pecans of superior quality grow in Richmond county.

The timber products are light. Perhaps the annual output amounts to \$8,000.

The 388 manufactories of this county have an output worth \$10,069,-750.

The total maximum available horse-power of the Savannah river and the Augusta canal is 34,090; the total developed is 14,000, and that in actual use is 11,000. On the tributaries of the Savannah river 504 horse-powers are utilized by 21 mills.

The mineral products are sandstone and some kaolin, brick and pottery clay, all of excellent quality.

Richmond county had on farms in 1890: 277 sheep, with a wool-clip of 278 pounds; 1,806 cattle, of which 93 were working oxen and 912 milch-cows; 625 horses, 678 mules, 4 donkeys, 27,227 of all kinds of domestic fowls and 5,094 swine. Among farm products were 165,992 gallons of milk, 18,923 pounds of butter, 25 pounds of cheese, 47,746 dozens of eggs and 7,930 pounds of honey. These statistics do not include live stock in Augusta and other towns.

Augusta, the county site, is located on the Savannah river at the head of steamboat navigation. By the census of 1900 the population of the city was 39,441, an increase of 6,141 over that of 1890. If we add to this the population of the immediate suburbs, we have over 45,000 people. Augusta is the third city in size in Georgia, and ranks first in the south in the manufacture of textile goods. Appropriately has it been called the "Lowell of the South" and "Fall River of the South." The great water power canal, nine miles long and 150 feet wide, owned by the city, develops 14,000 horse-powers, of which 11,000 are now in use. This immense power is available 12 months of the year and rents for only \$5.50 a horse-power per annum. The water of the canal is taken from the Savannah river at a point seven miles above the city, where a lock and dam of solid masonry are constructed.

There are mills belonging to nine different companies, having 6,188 looms and 220,166 spindles, which consume over 70,000 bales of cotton annually. Several large cotton-mills located across the river in South Carolina, though really a part of the city's industries and operated by its capital, are not here included. If they were, as has been done by persons estimating the factories of Augusta, the aggregate of mills, spindles, looms and capital would be greatly increased. But we must confine our estimate to mills situated in Richmond county. Two of these mills have a capital of \$1,000,000 each. Their products are sold in America, Europe, Asia and Africa in successful competition with spinners from England and New England.

The following is a list of the Augusta cotton-mills, with their capital, number of looms and number of spindles; also Richmond Factory in Richmond county:

Name of Mill.	Capital.	Looms.	Spindles.
Augusta	\$ 600,000	1,000	33,264
Enterprise	750,000	928	33,000
Globe	25,000	114	1,728
Isaetta	25,000	150	4,410
John P. King	1,000,000	1,812	60,384
Sibley	1,000,000	1,409	43,200
Sutherland	35,000		9,152
Warwick	25,000	224	4,100
Riverside (Batting Mill) ...	150,000		
Richmond Factory (not running).			
	<hr/> \$3,610,000	<hr/> 5,637	<hr/> 189,238

The mills of Augusta manufacture brown goods, shirting, sheeting, checks, cheviots, plaids, drills, duck, yarns, waste and batting. All use water-power except the Riverside Mill.

Augusta capital is also largely invested in the following South Carolina mills:

Name of Mill.	Capital.	Looms.	Spindles.
Aiken	\$ 400,000	766	27,500
Graniteville	600,000	1,106	34,990
Warren	500,000	1,000	35,000
Langley	700,000	1,300	43,000
	<hr/> \$2,200,000	<hr/> 4,172	<hr/> 140,490

The Clear Water Bleachery and Manufacturing Company, whose plant is at Clear Water, S. C., three and one-half miles from Augusta and largely under the control of the manufacturers of that city, was organized in 1900 with Mr. Thomas Barrett, Jr., as president, and Arthur C. Freeman as superintendent. Here the manufactured goods of Augusta and vicinity can be bleached. This company will also print calicos, shirting, etc.

Among the manufactories of Augusta and vicinity are fertilizer and cotton seed-oil factories, planing and lumber mills, brick yards, terra cotta works, foundries, machine manufactories, wagon, buggy and carriage factories, broom factories and hay presses, shirt factories and manufactories of medicines, clothing and minor articles.

Cotton is one of the greatset factors in the business of the city.

The annual receipts of cotton are from 200,000 to 275,000 bales. Of this large amount of cotton only 3,764 bales (upland) were ginned in Richmond county during the season of 1899-1900.

Augusta has railroad connection with five seaports and water transportation to Savannah besides. The great trunk lines centering there are the Southern, Georgia and Central systems in Georgia, and the South Carolina and Charleston and Western Railways of Carolina. The lively competition gives to the city great advantages in freights. A line of

steamboats to Savannah also helps to secure lower freight charges to the sea.

The trade transactions of all kinds amount to \$65,000,000 a year. The life and fire insurance agencies do an immense business.

The banking capital of Augusta amounts to \$1,846,186. The total bank clearances of Augusta in 1900 were \$68,142,465.04, an increase of \$20,056,946.12 over those of 1899.

Few cities present a more attractive appearance than Augusta. Broadway, the principal business thoroughfare, is about three miles long and 180 feet wide. It is paved with asphalt and has a double track electric railway in the center. The upper and lower portions have four rows of magnificent shade trees with a carriage way on each side of the two middle rows, while the space between these two rows forms a beautiful promenade in front of each man's door. There is a similar arrangement throughout the whole length of Greene street, which is about two and one-half miles long and 180 feet broad. On Broadway, formerly called Broad street, is one of the handsomest Confederate monuments in the whole south, and on Greene street is a cenotaph erected to the Confederate dead of Augusta and Richmond county, on which are engraved the names of all the soldiers from the city and county who died from disease or wounds while serving in the Confederate army. A monument of granite stands in front of the city hall erected to the memory of Button Gwinnett, Lyman Hall and George Walton, signers of the declaration of independence on behalf of the State of Georgia. The city hall is a handsome building which cost \$100,000, and the postoffice is another elegant structure.

Beautiful churches of all the Christian denominations adorn the city. The school buildings also are commodious and elegant. The Academy of Richmond County, on Telfair street, dates back to the colonial days. On the adjoining lot is the Augusta Medical College, a department of the State University.

On the Augusta canal stands the Confederate Obelisk, the tall chimney of the great powder mill that stood there during the war between the States. An electric railway connects the city with the beautiful town of Summerville, where stands the large United States arsenal, one of the most conspicuous buildings of which is the armory built by the Confederate government. Summerville contains in its corporate limits a population of 3,245.

Another line of electric railway connects the city with Lake Olmstead, a favorite evening resort of the citizens of Augusta. And yet another line over a handsome bridge across the Savannah river leads to North Augusta, a beautiful suburb on the Carolina hills.

The sanitary condition of the city is unexcelled by reason of its splendid sewerage and excellent system of water works. There is not a more charming scene in the State than that of Augusta at night with its myriad electric lights, as viewed from the Bon Air hotel at Summerville, or from Schultz's Hill and the heights of North Augusta on the Carolina side of the Savannah river.

In the public school system of Richmond county, which includes the schools of Augusta, there is an average attendance of 4,786 in the 36 schools for whites, and 3,499 in the 24 schools for colored pupils. Every county district and city ward enjoys the privilege of a nine-months' school term.

The area of Richmond county is 272 square miles, or 174,080 acres.

Population in 1900, 53,735, an increase of 8,541 since 1890; school fund, \$36,671.72.

By the Comptroller-General's report for 1900 there are: acres of improved land, 192,850; average value per acre, \$14.28; city property, \$10,290,895; shares in bank, \$1,014,280; merchandise, \$1,276,936; gas and electric light companies, \$183,350; invested in shipping, \$1,510; stocks and bonds, \$483,090; building and loan associations, \$474,556; cotton manufactories, \$3,093,737; money, etc., \$2,071,531; household furniture, \$809,110; farm and other animals, \$206,172; plantation and mechanical tools, \$97,880; watches, jewelry, etc., \$75,030; value of all other property, \$247,553; real estate, \$13,042,765; personal estate, \$10,712,070; aggregate value of property, \$23,754,835.

Property returned by colored taxpayers: Number of acres, 6,739; value, \$160,940; city property, \$566,990; stocks and bonds, \$300; money, etc., \$10,750; merchandise, \$8,275; household furniture, \$123,185; farm and other animals, \$16,120; watches, etc., \$230; plantation and mechanical tools, \$4,730; value of all other property, \$1,825; aggregate of all property, \$1,046,760.

The tax returns for 1901 show an apparent decrease of \$751,720 in the value of all property in Richmond county since the returns of 1900. This is plainly an error, for there has been no cause for a decrease, but for an increase in values.

Population of Richmond county by sex and color, according to the census of 1900: white males, 13,280; white females, 14,159; total white, 27,439; colored males, 11,949; colored females, 14,347; total colored, 26,296.

Population of the city of Augusta by sex and color, according to the census of 1900: white males, 10,066; white females, 10,847; total white, 20,913; colored males, 8,159; colored females, 10,369; total colored, 18,528.

Total population of Augusta, 39,441.

Population of Summerville town, by sex and color, according to the census of 1900: white males, 916; white females, 1,025; total white, 1,941; colored males, 585; colored females, 719; total colored, 1,304.

Total population of Summerville, 3,245.

Domestic animals in Richmond county in barns and inclosures, not on farms or ranges, June 1, 1900: 37 calves, 21 steers, 4 bulls, 764 dairy cows, 1,409 horses, 309 mules, 6 donkeys, 12 sheep, 148 swine, 47 goats.

Domestic animals in the city of Augusta in barns and inclosures, June 1, 1900: 30 calves, 16 steers, 4 bulls, 618 dairy cows, 1,197 horses, 294 mules, 6 donkeys, 10 sheep, 4 swine, 31 goats.

SOME DISTINGUISHED CITIZENS OF RICHMOND COUNTY.

John Forsyth, one of the most distinguished Americans, and the man who conducted the negotiations with Spain for the cession of Florida to the United States; Governor George W. Crawford; Governor John Milledge; George Walton, one of the signers of the declaration of independence; Governor Charles J. Jenkins; Richard Henry Wilde, a native of Ireland, a famous writer of prose and verse; Hon. Alfred Cumming, at one time Governor of Utah; Judge Augustus B. Longstreet, author of *Georgia Scenes*; General Joseph Wheeler, the celebrated Confederate cavalry leader and subsequently in the Spanish-American war commander of the cavalry division of the United States army in the campaign of Santiago, Cuba, and who was born at the Wheeler place, on Rae's creek; General W. H. T. Walker, who fell in defense of his native State at the battle of Atlanta (July 22nd, 1864,) and who was buried in the United States arsenal cemetery at Summerville; General Thomas Flournoy, a hero of the war of 1812. Madame Octavia Walton LeVert long resided at Summerville.

Camp McKenzie, where 8,000 troops were stationed during the Spanish-American war, extended from Monte Sano, on the outskirts of Summerville, to Wheelless Station on the Georgia Railroad.

HISTORICAL INCIDENTS.

After the fall of Charleston, S. C., in May, 1780, the British overran South Carolina and Georgia, and a British garrison, under Colonel Thomas Browne, occupied Augusta. This Colonel Browne had been very roughly handled by the patriots at Augusta in 1774, and the desire for revenge prompted him to many acts of cruelty.

In September, 1780, Colonel Elijah Clarke, the great Georgia partisan leader, laid siege to Augusta, and was on the point of effecting its capture, when the arrival of reinforcements to the enemy caused Clarke to raise the siege and retire. Colonel Henry Lee, familiarly known as "Light Horse Harry," and the father of General Robert E. Lee, says in his memoirs that Clarke's expedition against Augusta was the primary cause of the assembling of the mountain riflemen of North Carolina and Kentucky (the latter State being at that time the western district of Virginia), who, assisted by some South Carolina and Georgia militia, attacked and defeated the British and Tories under Ferguson at King's Mountain, thereby checking the tide of British conquest in the south.

In the spring of 1781 Colonel Elijah Clarke again attacked the British at Augusta, where he was soon joined by the South Carolinians under General Andrew Pickens. Being soon after reinforced by Colonel Henry Lee with his legion of Continentals from Greene's army, the Americans, by the 15th of May, had the British completely shut in, and, on the 5th of June, received the surrender of the British forts and garrisons. This splendid victory was soon followed by the recovery of all Georgia from the enemy, with the exception of Savannah, which was finally surrendered to the Americans July 11th, 1782.

St. Paul's Episcopal church stands on part of the ground occupied by

Fort Cornwallis, where the British garrison made its stout, but unavailing defense.

In 1791 Augusta, at that time the capital of Georgia, was visited by President Washington, who was met five miles down the Savannah road by Governor Edward Telfair and a military escort. He was entertained at Meadow Garden by Chief Justice George Walton.

The first bridge across the Savannah at Augusta was built by Wade Hampton, father of General Wade Hampton, the gallant Confederate. Being washed away by the Yazoo freshet of 1796, another was commenced in 1812, and completed in 1815, on the day when the news reached Augusta of the victory of General Andrew Jackson at New Orleans, in honor of which event the new bridge was decorated and at night brilliantly illuminated.

The first steamboat on the Savannah river, called the *Enterprise*, appeared at Augusta in 1817, on which occasion the stores were closed and hundreds from the city and surrounding country flocked to see it. It is said that many paid a dollar for the privilege of inspecting its works.

In 1825 Augusta was honored by a visit from the Marquis de La Fayette.

It is claimed that Eli Whitney perfected his cotton gin on the plantation of the widow of General Nathaniel Greene, in Richmond county, subsequently owned by Mr. John Phinizy. Whitney received his patent from the State of Georgia in 1793. The first gin practically operated was owned by Patrick Moore, and was located on the west side of Washington street, between Greene and Telfair streets. By a strange coincidence, Mr. Joseph Eve, father of the celebrated physician of that name, and grandfather of Judge W. F. Eve, of Richmond county, wrote a letter from Nassau, dated November 24th, 1794, in which he stated that he had invented a machine for separating the seed from the cotton which had been for several years used in the Bahama Islands, and for which he requested a patent. It is not known what principle was involved in his device.

As early as 1834 the Richmond Factory was built on Spirit creek.

During the four years of the civil war thirty companies were raised in Augusta and Richmond county, and not less than 2,000 men out of a total white population of about 10,000 people enlisted in the Confederate army. Of these 292 were killed or died in service. The following general officers of the Confederate army lived in Augusta, or vicinity in Richmond county, at one time or another: Lieutenant-Generals James A. Longstreet and Joseph Wheeler; Major-Generals W. H. T. Walker, A. R. Wright and LaFayette McLaws; Brigadier-Generals Montgomery Gardner, M. A. Stovall, John K. Jackson, Goode Bryan and Alfred Cumming.

When Sherman was marching through Georgia in December, 1864, and again when in the spring of 1865 he was making his advance through South Carolina, General Joseph Wheeler, by the defeat of the Federal cavalry under Kilpatrick, saved Augusta from the fate which befell Atlanta and Columbia.

ROCKDALE COUNTY.

Rockdale County received its name on account of the immense ledge of rock running through it. The following counties bound it: Walton on the northeast, Newton on the southeast, Henry on the southwest, DeKalb and Gwinnett on the northwest. DeKalb also lies north of a narrow projection of Rockdale county in the southwest. This county is nearly rectangular in shape, the general direction of its two longest sides being from northeast to southwest.

It is watered by Yellow and South rivers, both tributaries of the Ocmulgee. There are also several smaller streams in the county. There are natural falls sufficient for operating mills or factories, some of them possessing 100 horse-powers. The aggregate water-power of the county is about 1,000 horse-powers.

The lands on the ridges are gray; on the rivers and creeks, dark and very productive. Under ordinary cultivation the average production to the acre is: corn, 10 bushels; wheat, 8 bushels; oats, 15 bushels; rye, 5 bushels; Irish potatoes, 75 bushels; sweet potatoes, 60 bushels; field peas, 5 bushels; ground-peas, 10 bushels; seed cotton, 500 pounds; crab-grass hay, 1,000 pounds; corn fodder hay, 200 pounds; sorghum syrup, 100 gallons; sugar-cane syrup, 75 gallons. Under improved methods, much better results are recorded, as for instance: corn and oats, 20 bushels each; wheat, 10 bushels; rye, 8 bushels; barley, 20 bushels; sweet potatoes, 100 bushels; field-peas, 10 bushels; ground-peas, 20 bushels; seed cotton, 800 pounds; crab-grass and Bermuda grass hay, 2,000 to 3,000 pounds; sorghum syrup, 200 gallons; sugar-cane syrup, 300 gallons. Mr. W. L. Peek made 600 gallons of syrup from one acre of sugar-cane. Bermuda grass is extensively cultivated and is becoming quite popular. All kinds of forage, such as sorghum, peavine and the different species of millet, do well and are being cultivated more and more.

Much more attention is being paid than ever before to the improvement of the breeds of milch-cows and beef cattle. There is one dairy farm, but all farmers keep cows and have milk and butter for home use, and many of them have a surplus for sale. In 1890 there were 2,141 cattle, of which there were 72 working oxen and 973 milch-cows. The production of milk amounted to 315,791 gallons, and of butter to 119,437 pounds. The poultry amounted to 45,417 of all kinds and their eggs numbered 65,402 dozens. There were also gathered 7,337 pounds of honey.

Rockdale county had 353 horses, 691 mules and 2,727 swine; also 78 sheep, yielding 15 pounds of wool.

There is abundance of game in the county, but fish are scarce.

Vegetables, berries, fruits and melons are raised for home consumption. About 1,500 acres are devoted to peaches, 100 each to cherries and apples.

There are still about 10,000 acres of forest timber. Most of the large trees have been cut off. A few steam sawmills are in operation.

Granite is found in this county in great quantities. There are four quarries kept busy in preparing the granite for paving and building material.

The manufactories of the county are: one paper mill, one cotton seed oil-mill, one fertilizer manufactory, one roller flour-mill, one furniture factory and five flour and grist-mills. The paper mill and four of the flour and grist-mills are operated by water, the rest by steam. There are 10 cotton gins in the county.

Conyers, the county site, with a population of 1,605 people, is located in the center of the county, on the Georgia Railroad. In the district in which it is situated there are 3,880 people. The court-house cost about \$5,000 and the jail about \$3,000. It contains most of the manufacturing establishments mentioned above, a bank with a capital of \$100,000, several fine mercantile establishments, good schools, and churches of the Methodist, Baptist, Presbyterian and Bible Christian denominations. The public schools of the whole county number 34, and churches are convenient to every neighborhood.

The annual shipments of cotton, mostly from Conyers, amount to about 10,000 bales. According to the United States census of 1900 there were ginned in this county 7,368 bales of upland cotton of the crop of 1899-1900.

The proximity of this county to the great city of Atlanta adds to its advantages. It has for a market not only its home town, Conyers, but in Atlanta there will always be a ready sale for all the products that it can raise above home consumption.

The area of Rockdale county is 121 square miles, or 77,440 acres.

Population in 1900, 7,515, a gain of 702 since 1890; school fund, \$2,933.30; school fund of Conyers, \$982.10.

By the Comptroller-General's report for 1900 there are: acres of improved land, 83,696; average value per acre, \$6.44; city property, \$231,129; money, etc., \$199,521; merchandise, \$42,469; cotton manufactories, \$50; household furniture, \$70,454; farm and other animals, \$85,236; plantation and mechanical tools, \$28,246; watches, jewelry, etc., \$4,862; value of all other property, \$19,240; real estate, \$812,537; personal estate, \$458,671; aggregate value of property, \$1,271,208.

Property returned by colored taxpayers: Number of acres, 2,373; value, \$15,621; city property, \$9,447; merchandise, \$112; household furniture, \$6,869; farm and other animals, \$9,821; plantation and mechanical tools, \$2,368; watches, etc., \$81; value of all other property, \$416; aggregate value of property, \$42,139.

The tax returns for 1901 show a gain of \$41,000 in the value of all property since 1900.

There is an average attendance of 486 pupils in the 19 schools for whites, and 550 in the 15 schools for colored pupils.

Population of Rockdale county by sex and color, according to the census of 1900: white males, 2,183; white females, 2,236; total white, 4,419; colored males, 1,570; colored females, 1,526; total colored, 3,096.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 39 calves, 4 steers, 1 bull, 56 dairy cows, 81 horses, 4 mules, 86 swine, 1 goat.

SCHLEY COUNTY.

Schley County was formed out of Macon, Marion and Sumter in 1857. It was named for Hon. William Schley, Governor of Georgia from 1835 to 1837. It is bounded by the following counties: Taylor on the north, Macon and Sumter on the east, Sumter on the south, and Marion on the west. Macon county is also on the north of the southeastern projection of this county.

Buck creek runs across the county from west to east and Muckalee creek runs across the southwestern section, its course being southeasterly.

The soil belongs mostly to the tertiary formation, with a cretaceous belt in the extreme northern portion of the county. The land in this section is level, sometimes rolling, its soil being a gray, sandy loam. In the southern part there is an outcrop of red clay. The water is both freestone and limestone.

The lands average to the acre: corn, $9\frac{1}{2}$ bushels; oats, 9 bushels; Irish potatoes, 100 bushels; sweet potatoes, 200 bushels; field-peas, 12 bushels; ground-peas, 40 bushels; seed cotton 500 pounds; corn fodder, 200 pounds; sugar-cane syrup, 150 gallons. Some of the lands under the best system of culture produce 15 bushels of corn, 20 of oats, and 700 pounds of seed cotton to the acre.

The forest growth consists of long-leaf pine, oak, hickory, ash, maple and the usual swamp growth on the creeks. The annual output of timber products is about \$8,000.

According to the United States census of 1900 there were ginned in this county 5,760 bales of upland cotton during the season of 1899-1900.

Seventy horse-powers on tributaries of the Flint are utilized by six grist-mills, which supply the farmers with meal ground near their homes. There are five manufactories in the county with an annual output worth about \$18,000.

A few vegetables and fruits are raised over and above home consumption. The truck sold amounts to about \$2,500. The county has 7,670 peach-trees and 600 apple-trees. There are also some pears, plums and cherries.

According to the census of 1890 there were in Schley county 2,386 cattle, of which 164 were working oxen and 829 milch-cows. The production of milk was 195,160 gallons, and of butter 59,480 pounds. The sheep numbered 78 and yielded 154 pounds of wool. Of domestic fowls there were 28,152 and their eggs numbered 44,065 dozens. There were 387 horses, 731 mules, 1 donkey and 6,734 swine. The production of honey in the county was 2,937 pounds.

The farmers are beginning to improve their cattle by the introduction of the higher grades, especially of dairy cows.

Ellaville, the county site, is located on a branch of the Central of Georgia Railroad, 21 miles northwest of Americus. Its population is 474, but Town district, which includes Ellaville, contains 2,300 inhabitants.

Other postoffices in the county are LaCrosse, Murray's Cross Roads, Poindexter, Schley and Stewart's Mill.

There are good churches and schools in every part of the county. There are 20 public schools, half for white and half for colored. The attendance is 291 white and 357 colored.

The area of Schley county is 188 square miles, or 120,320 acres.

Population in 1900, 5,499, a gain of 56 since 1890; school fund, \$3,-551.18.

By the Comptroller-General's report for 1900 there are: acres of improved land, 83,696; average value per acre, \$6.94; city property, \$58,-370; money, \$51,838; merchandise, \$33,659; household furniture, \$42,-455; farm and other animals, \$76,556; plantation and mechanical tools, \$16,330; watches, jewelry, etc., \$2,662; value of all other property, \$10,-932; real estate, \$479,218; personal estate, \$241,834; aggregate value of property, \$721,052.

Property returned by colored taxpayers: Number of acres, 3,037; value, \$8,749; city property, \$2,430; money, etc., \$629; household furniture, \$9,464; watches, etc., \$91; farm and other animals, \$9,920; plantation and mechanical tools, \$1,977; value of all other property, \$434; aggregate value of property, \$34,717.

The tax returns for 1901 show an increase of \$62,681 in the value of all property since the returns of 1900.

Population of Schley county by sex and color, according to the census of 1900: white males, 952; white females, 964; total white, 1,916; colored males, 1,716; colored females, 1,867; total colored 3,583.

Domestic animals in Schley county in barns and inclosures, not on farms or ranges, June 1, 1900: 4 calves, 1 steer, 1 bull, 16 dairy cows, 19 horses, 3 mules, 32 swine.

SCREVEN COUNTY.

Screven County was formed from Burke and Effingham in 1793, and a part was set off to Bulloch in 1796. It was named for General James Screven.

The boundaries are as follows: Burke county on the northwest, the State of South Carolina on the northeast and east, Effingham county on the southeast and Bulloch and Emanuel counties on the southwest. The Savannah river separates it from South Carolina, and the Ogeechee river from Bulloch and Emanuel counties.

Brier and Beaverdam creeks enter the county from the northwest and uniting a little above the center, flow eastward under the name of the former and empty into the Savannah river. Horse creek and Little Ogeechee river empty into the Ogeechee on the southwest.

The soil is siliceous. The uplands are gray and sandy, with hummock land along the streams. In places there are outcrops of red clay and marl

beds. The average yield to the acre of the various crops varies in different sections, but taking the average of four different reports we have: corn, 12½ bushels; wheat, 10 bushels; oats, 15½ bushels; rye, 11 bushels; rice, 27½ bushels; field-peas, 8 bushels; ground-peas, 25 bushels; chufas, 50 bushels; Irish potatoes, 65 bushels; sweet potatoes, 100 bushels; seed cotton, 676 pounds; sorghum syrup, 200 gallons; sugar-cane syrup, 240 gallons. No report of average yield of hay, but sorghum forage is highly esteemed for stock. Field-peas are sowed after oats, and being cut with the crab-grass make fine hay. One report gives the amount of hay for the county as 262 tons, or 524,000 pounds.

The introduction of better cattle has greatly increased during the last ten years, but very little attention has been paid to the rearing of beef cattle. All the farmers keep cows, but there is only one dairy farm and this has a capacity of 25 pounds of butter a day. In 1890 there were 12,091 cattle in the county, 228 of these being working oxen. The milch-cows, which numbered 3,657, produced 326,779 gallons of milk. The butter made on farms was 24,979 pounds. From the hives were gathered 12,936 pounds of honey. The poultry numbered 70,122. The production of eggs amounted to 113,382 dozens. There were 5,970 sheep, yielding 11,773 pounds of wool. There were 978 horses, 1,431 mules, 5 donkeys, 22,193 swine and (by a more recent estimate) 500 goats.

The best yield reported for seed cotton is 800 pounds to the acre; for oats, 25 bushels; for sweet potatoes, 150 bushels; for Irish potatoes, 100 bushels; for rice, 40 bushels.

The rivers and creeks are very well stocked with fish, but game is rather scarce.

Vegetables, berries and fruits are raised, mostly for home consumption. A great many melons are raised, and the profits on them vary from \$5 to \$15 an acre, according to size, quality and difficulty of transportation. The county has 29,495 peach and 11,867 apple-trees. The truck sold is worth about \$3,500.

A very large per cent. of original forest is still standing, consisting of long leaf pine and cypress, and along the streams white oak, ash, maple and poplar. The annual output of lumber is about 1,000,000 superficial feet at from \$6 to \$10 a thousand feet. The total output of all timber products is about \$50,000.

There is considerable clay in the county useful for manufacturing purposes. Buhrstone of splendid quality is found.

On the Ogeechee river two small mills use about 20 horse-powers. There are in the county 1 flour-mill, 20 or more small grist-mills, and a dozen sawmills. A new cotton factory at Millen, having 5,000 spindles and a capital of \$80,000, is rapidly approaching completion. There are also 12 turpentine distilleries.

Methodists, Baptists, Presbyterians, Episcopalians and Lutherans constitute the religious denominations. Churches are conveniently located for the people. The public schools are 86 in all. The average attendance is 1,063 in the 48 white schools and 1,294 in the 38 colored schools.

The facilities for travel and transportation are the Central of Georgia and a branch road running from Rockyford on the Central to Sylvania. There is also the Savannah river, on which there are lines of steamboats plying between Augusta and Savannah, and touching at landings in the county.

Sylvania, the county site, is conveniently located, and has a courthouse and jail worth \$20,000. The Sylvania district has a population of 3,135, of whom 545 live in the town.

Millen, on the Central of Georgia Railroad, is a growing town with several successful mercantile establishments, and has a bank with a capital of \$100,000. The Millen district has 2,491 people, of whom 411 live in the town. The merchants of this town handle about 10,000 of the 40,000 bales of cotton shipped from this county. The products of this county are marketed in Savannah and Augusta.

According to the United States census of 1900 there were ginned in this county 17,666 bales of upland and 297 of sea-island cotton during the season of 1899-1900.

Millen has a cotton and yarn mill with 5,000 spindles.

The area of Screven county is 734 square miles, or 467,760 acres.

Population of Screven county in 1900, 19,252, a gain of 4,828 since 1890; school fund, \$13,051.36.

By the Comptroller-General's report for 1900 there are: acres of improved land, 404,080; of wild land, 19,145; average value per acre of improved land, \$1.29; of wild land, \$0.37; city property, \$108,357; money, etc., \$168,636; merchandise, \$112,242; stocks and bonds, \$33,826; cotton manufactories, \$1,000; household furniture, \$80,989; iron works, \$3,430; farm and other animals, \$221,680; plantation and mechanical tools, \$47,379; watches, jewelry, etc., \$6,613; value of all other property, \$79,758; real estate, \$639,295; personal estate, \$784,157; Aggregate value of property, \$1,423,452.

Property returned by colored taxpayers: number of acres, 14,552; value, \$18,763; city property, \$2,360; money, etc., \$1,028; merchandise, \$550; household furniture, \$11,453; watches, etc., \$527; farm and other animals, \$34,221; plantation and mechanical tools, \$6,635; value of all other property, \$2,004. Aggregate value of property, \$78,645.

The tax returns for 1901 show a gain of \$166,186 in the value of all property since the returns of 1900.

Population of Screven county by sex and color, according to the census of 1900: white males, 4,269; white females, 4,037; total white, 8,306; colored males, 5,582; colored females, 5,364; total colored, 10,946.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 59 calves, 39 steers, 4 bulls, 86 dairy cows, 69 horses, 38 mules, 328 swine, 47 goats.

SPALDING COUNTY.

Spalding County was formed in 1851 from the counties of Pike and Henry. It was named for Hon. Thomas Spalding, of St. Simon's Island, Glynn county, a member of the Georgia Legislature and a representative in Congress. The following counties bound it: Clayton and Henry on the north, Henry on the northeast, Butts and Monroe on the east, Pike on the south, Fayette on the northwest, Fayette, Coweta and Meriwether on the west. The Flint river flows along its northwestern border and then through the western section of the county. Line creek runs along part of its western boundary and empties into the Flint river at its southwestern point. Towaliga creek (or river, as it is sometimes called), after dividing part of the northeastern section of Spalding from Henry county, runs through Butts and Monroe counties and empties into the Ocmulgee river. Big Potato creek, rising near the center of the county, flows southward through Pike and Upson counties and empties into the Flint river. Other streams are Cabin, Grape and Head's creeks. The lands on and adjoining all these streams are generally rich. The character of the soil is metamorphic; red clay or mulatto lands in the eastern part; gray, gravelly lands in the western. The average yield of the various crops varies of course according to location and favorableness of season. Two reports made in different years show averages to the acre as follows: corn, from 10 to 14 bushels; oats, from 10½ to 20 bushels; wheat, 10 bushels; sweet and Irish potatoes, 300 bushels each; sugarcane syrup, 169 to 300 gallons; seed cotton, 428 to 714 pounds; hay, 2,816 to 4,000 pounds. The best farmers in the county have proved that with proper cultivation the lands can be made to produce from 30 to 60 bushels of wheat to the acre. In 1900 Mr. W. J. Bridges, on four acres of ground, raised 65 bushels of wheat to the acre, and on the same number of acres Mr. W. D. Walker raised 59½ bushels to the acre. Each of these gentlemen received a prize at the convention of the Wheat Grower's Association of Georgia, held in Macon, July 11, 1900. Some years ago Mr. Solomon W. Bloodworth gathered 137 bushels of corn from one acre near Griffin, and received the first premium at the State Agricultural Fair. Another well-authenticated yield is 10,720 pounds of pea-vine hay to the acre. These things show what can be done by scientific culture in Spalding county. Bermuda is considered the best pasture for cattle, since it comes in early in the spring and lasts until late in the fall. Clover and vetches, pea-vine hay, sorghum and millet are cultivated for forage crops. The cane bottoms afford good winter pasturage. The breeds of dairy cattle have been much improved, the Jersey being the favorite. All the farmers have milk and butter. There are 10 dairy farms with from 10 to 60 cows each, which make good profits on the investment. More interest is being taken in beef cattle and better breeds are being brought in.

In 1890 there were in Spalding county 2,711 cattle, of which 1,190 were milch-cows producing 425,370 gallons of milk, from which 124,721 pounds of butter were made. One thousand and two hundred

pounds of cheese were made in 1900. The working oxen of the county numbered 97. They are being rapidly supplanted by horses and mules. The creamery at Griffin has a capacity of 10,000 pounds of milk a day. The present output of the creamery (1900) is 1,000 to 1,200 pounds of milk, and 50 pounds of butter a day. More milk is needed to work the creamery to its full capacity.

The domestic fowls (poultry) of all kinds in the county in 1890, numbered 20,475, and produced 69,939 dozens of eggs. The production of honey was 8,906 pounds. This county had 514 horses, 1,288 mules, 1 donkey and 3,924 swine. In 1890 the sheep numbered 287 and yielded 723 pounds of wool.

The supply of fish from the streams is not so abundant as formerly. The principal game birds are quail and doves.

There are 12 market gardens raising all varieties of vegetables. Berries and plums are also extensively raised. Melons of the best quality are raised. The value of truck sold is about \$16,000 annually, most of it for home consumption.

Of the acreage given to fruits, far the greater portion is devoted to peaches. There are in the county 134,924 peach, 19,390 pear and 3,152 plum-trees.

The vineyards of the county are not as numerous as formerly, because attention has been directed to other products.

The timber products are small: short-leaf pine and hardwoods; some ash, maple and poplar. The output is about \$8,000 worth. There are four sawmills.

There is one flour and grist-mill in the limits of Griffin, and one in the Mount Zion district. The mills are operated by water-power.

Griffin, the county site, is situated near the center of Spalding county at the junction of two branches of the Central of Georgia Railroad, and that branch of the Southern Railway connecting Columbus with McDonough. Its population by the census of 1900 is 6,857. That its location is one of the best agricultural and horticultural sections of Georgia is evidenced by the fact that the State of Georgia and the United States government unanimously selected the vicinity of Griffin as the site for the Experiment Station.

Within the last decade Griffin has become a factory center, having built four cotton-mills, representing almost entirely a home capital of \$1,000,000. We give a list of these mills and the class of goods manufactured by them.

The Griffin Manufacturing Company has a capital of \$350,000, and contains 15,000 spindles and 593 looms. It manufactures cottonades, ticking, duck, chevots, skirts, hickory shirting, domestic shirting. It spins 450 bales of cotton a month, employs 550 hands, has a pay-roll of \$8,500 a month and an annual output of \$600,000.

The Kincaid Manufacturing Company has a capital of \$250,000, and contains 12,500 spindles and 430 looms. It manufactures Turkish towels, table damask, a fine grade of ginghams, ticking and

crashes. It spins 350 bales of cotton a month, employing 425 hands, has a pay-roll of \$7,000 a month and an annual output of \$500,000.

The Spalding Cotton Mills have a capital of \$200,000, and contain 9,000 spindles and 236 looms. They spin 208 bales of cotton a month and manufacture sheeting and cotton diaper. The hands employed number 175, the pay-roll is \$2,000 a month and the value of the annual output is \$300,000.

The Rushton Mills have a capital of \$100,000, and contain 5,000 spindles and 150 looms. They spin 125 bales of cotton a month and manufacture sheeting. The hands employed number 136, the pay-roll is \$2,000 a month, and the value of the annual output is \$150,000.

The Griffin Knitting Mill has a capital of \$20,000; manufactures men's ribbed underwear, employs 40 hands, and has an annual output of \$50,000.

The Griffin Creamery has been already described. There is also a cotton seed oil-mill, with an output of 160,000 gallons of oil and 1,450 tons of cotton seed-oil meal. There are also an ice factory, a pants factory, a sash, blind and chair factory, a small foundry, and various smaller enterprises. There is one establishment which cultivates flowers and flowering plants for sale.

Griffin has four banks with a combined capital of \$500,000. It has a system of graded schools and some of the finest public buildings of the State. The value of the court-house is \$35,000. Its extensive system of water-works gives complete protection against fire and furnishes water everywhere. By its electric plant the streets are brilliantly lighted. The water-works and electric plant are owned by the city. Griffin has good church buildings of the Methodists, Baptists, Presbyterians, Episcopalians and Bible Christians.

The union depot of Griffin is the highest point between Macon and Atlanta.

The public roads of Spalding county are worked by convict labor, and the 600 miles of roadway are kept in first-class condition.

In addition to the three railroads mentioned as crossing each other at Griffin, there is another branch of the Southern Railway from Atlanta to Fort Valley, running through the western section of the county.

Griffin is the shipping point and market for the county. The number of cotton bales received is 18,500, of which 5,000 bales are exported and 13,500 are used by the cotton-mills of the county.

By the United States census of 1900 there were ginned in this county 11,390 bales (upland) of the cotton crop of 1899-1900.

The public schools of the county are 22 for the whites and 20 for the colored with an average attendance of 723 white pupils and 529 colored. In the Griffin white schools are 542 pupils and in the colored schools 119.

With unsurpassed advantages of climate, soil and various enterprises Spalding county and the city of Griffin offer great inducements and a hearty welcome to new citizens.

Other postoffices are Sunnyside, Pomona, Vineyard, Orchard Hill, Experiment, Drewryville, Rover, Zetella and Strickland.

Sunnyside was for years the home of Colonel John McIntosh Kell, once first officer of the Confederate cruiser Alabama.

The area of Spalding county is 203 square miles, or 129,420 acres. Population in 1900, 17,619, an increase of 4,502 since 1890; school fund, \$6,519.17; school fund of Griffin, \$3,065.55.

By the Comptroller-General's report for 1900, there are: acres of improved land, 116,287; average value per acre, \$7.97; city property, \$879,347; shares in bank, \$250,500; money, etc., \$160,395; value of merchandise, \$124,360; stocks and bonds, \$7,300; cotton manufactories, \$718,150; invested in iron works, \$9,000; household furniture, \$150,938; farm and other animals, \$121,301; plantation and mechanical tools, \$41,460; watches, jewelry, etc., \$10,467; value of all other property, \$58,569; real estate, \$1,806,409; personal estate, \$1,695,407. Aggregate value of property, \$3,501,816.

Property returned by colored taxpayers: number of acres, 3,891; value, \$40,251; city property, \$75,705; money, etc., \$100; merchandise, \$1,245; household furniture, \$16,675; watches, etc., \$104; farm and other animals, \$18,325; plantation and mechanical tools, \$5,348; value of all other property, \$425.00. Aggregate value of whole property, \$159,310.

The tax returns for 1901 show an increase of \$233,957 in the value of all property since the returns of 1900.

Population of Spalding county by sex and color, according to the census of 1900: white males, 4,152; white females, 4,313; total white, 8,465; colored males, 3,396; colored females, 4,758; total colored, 9,154.

Population of the city of Griffin by sex and color, according to the census of 1900: white males, 1,688; white females, 1,911; total white, 3,599; colored males, 1,449; colored females, 1,809; total colored, 3,258.

Total population of Griffin, 6,857.

Domestic animals in Spalding county in barns and inclosures, not on farms or ranges, June 1, 1900: 122 calves, 34 steers, 370 dairy cows, 272 horses, 57 mules, 2 sheep, 328 swine, 1 goat.

STEWART COUNTY.

Stewart County was formed from Randolph county in 1830, and was named for General Daniel Stewart, who was born in Liberty county in 1762; joined the American army at the age of fifteen and served under Generals Sumter and Marion and Colonel W. R. Harden, proving himself under all circumstances a brave and faithful soldier.

Stewart county is bounded on the north by Chattahoochee county, on the east by Webster county, on the south by Randolph and Quitman counties, and on the west by the State of Alabama, from which it is separated by the Chattahoochee river. Pataula and Hodchodkee creeks flow southward from near the center of the county. Hanna-hatchee creek flows from east to west across the county, a little north

of the center. These streams are tributaries of the Chattahoochee river. Other streams are Hitehite and Grass creeks.

The soil is for the most part a gray sandy, mixed with gravel. There is some red land in the eastern portion. The soil is well adapted to cotton, the cereals, sugar-cane, fruits, especially peaches and melons, and to crab, Bermuda, Johnson and crowfoot-grasses. The average yield to the acre of the various crops is: corn, 10 bushels; wheat, 8 bushels; oats, 25 bushels; rye, 8 bushels; sweet potatoes, 75 bushels; field-peas, 9 bushels; ground-peas, 15 bushels; seed cotton, 500 pounds; hay, 2,000 pounds; sugar-cane syrup, 180 gallons. Bermuda grass is used for summer pasturage, lasting 7 months, and rye for winter pasturage. Corn and field-peas ground together are used a great deal as feed for cattle. The best lands under the best culture can be made to yield as much as 20 bushels of corn to the acre; 200 of potatoes, 800 pounds of seed cotton, 4,000 pounds of hay and 300 gallons of syrup.

All farmers have cows for the production of milk and butter, and in the vicinity of Lumpkin there is one regular dairy farm. Some farmers are making a business of raising beef cattle and of improving the breed of both beef and dairy cattle. In 1890 there were in Stewart county 4,630 cattle, of which there were 295 working oxen and 1,543 milch-cows. There was a production of 315,400 gallons of milk and 107,456 pounds of butter. The domestic fowls of all kinds numbered 55,732 and produced 140,663 dozens of eggs. The honey collected from the hives was 12,607 pounds. Stewart county had in 1890 on farms, 693 horses, 1,976 mules, 4 donkeys and 8,149 swine. The sheep numbered 331, and produced 520 pounds of wool.

The productions of the gardens and orchards are for the most part consumed at home. About 500 acres are devoted to peaches, 25 to plums, 20 to apples and 10 to pears.

The manufactures of the county are: one wagon and buggy factory and one guano factory at Richland; a large brick kiln at Omaha; 4 flour and 12 grist-mills, and 10 steam sawmills. There is a bank at Richland and one at Lumpkin, each having a capital \$50,000. Richland, on the eastern side of the county, is at the junction of two branches of the Georgia and Alabama Railroad of the Seaboard Air Line system.

Lumpkin, the county site, is on the main stem of the Georgia and Alabama Railroad. This town is beautifully located. The court-house is valued at \$22,000 and the jail at \$8,000.

There are 52 mercantile establishments in the county, and 6 life and fire insurance agencies.

Fitzgerald's mill, on Hannahatchee creek, has a side track running to the mill. It has two runners, a cotton gin and sawmill. Within a few yards of the railway on the same creek there is a fine mill site.

In addition to the two railroads running through the county, the Chattahoochee river furnishes fine water transportation.

The products of Stewart county are marketed in Lumpkin and Richland, of that county; in Americus and Columbus, Georgia, and Montgomery, Alabama.

Methodists, Baptists and Presbyterians are the prevailing religious sects. Church buildings are found at convenient distances throughout the county.

There are two high schools and many schools of lower grades through the county. There are 23 schools for whites and 33 for colored, with an average attendance of 733 white pupils and 1,130 colored.

The area of Stewart county is 440 square miles, or 281,600 acres. Population in 1900, 15,856, a gain of 174 since 1890; school fund, \$11,-986.87.

By the Comptroller-General's report for 1900 there are: acres of improved land, 283,323; average value per acre, \$3.06; city property, \$234,015; shares in bank, \$93,900; money, etc., \$123,020; merchandise, \$88,645; stocks and bonds, \$2,850; household furniture, \$86,745; farm and other animals, \$148,170; plantation and mechanical tools, \$25,065; watches, jewelry, etc., \$5,773; value of all other property, \$36,670; real estate, \$1,103,285; personal estate, \$619,055. Aggregate value of whole property, \$1,688,235.

Property returned by colored taxpayers: number of acres, 10,704; value, \$26,760; city property, \$12,135; money, etc., \$475; merchandise, \$200; household furniture, \$22,175; watches, etc., \$100; farm and other animals, \$31,690; value of all other property, \$6,940. Aggregate of whole property, \$100,475.

The tax returns for 1901 show a gain of \$99,280 in the value of all property since the returns of 1900.

According to the United States census of 1900, there were ginned in Stewart county 17,875 bales of upland cotton during the season of 1899-1900.

The town of Lumpkin contains, 1,470 inhabitants, while the district in which it is included has a population of 3,563.

The town of Richland has more than doubled in the last decade, and has a population of 1,014, while the whole district of Richland including the town contains 2,746 inhabitants.

Near Omaha town are some mineral springs, from which the district of Mineral Springs derives its name.

Population of Stewart county by sex and color, according to the census of 1900: white males, 2,018; white females, 2,001; total white, 4,019; colored males, 5,759; colored females, 6,078; total colored, 11,837.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 24 calves, 67 dairy cows, 63 horses, 7 mules, 1 sheep, 177 swine, 2 goats.

SUMTER COUNTY.

Sumter County was formed from Lee in 1831, and was named for General Thomas Sumter, who was born in Virginia in 1734, and settled in South Carolina. He was a distinguished commander of South Carolina troops in the Revolution, and on account of his dashing leadership was styled the "game cock."

Schley and Macon counties bound Sumter on the north, Dooly bounds

it on the east, Lee and Terrell on the south, Webster, Marion and Schley on the west. The Flint river forms its eastern boundary. The streams of the county are the Muckalee, Muckaloochee and Kinchafoonee creeks.

The soil belongs to the tertiary formation and is a gray, sandy loam with red outcrops in places. The lands are either level or gently rolling. The water is mainly freestone, though there is some limestone. The production of the lands to the acre averages: corn, 11 bushels; oats, 12; wheat, 5½ bushels; rye, 7 bushels; Irish potatoes, 100 bushels; sweet potatoes, 250 bushels; field-peas, 10 bushels; ground-peas, 20 bushels; seed cotton, 576 pounds; crab-grass hay, 4,000 pounds; corn fodder, 450 pounds; sugar-cane syrup, 250 gallons.

Some farmers under careful culture, make much larger yields of some of these items, as for instance: corn, 20 bushels; wheat, 10 bushels; oats, 25; rye, 10 bushels; field-peas, 15 bushels; ground-peas, 30 bushels; seed cotton, 800 pounds; sugar-cane syrup, 300 gallons. Many use Bermuda grass for summer pasturage and maiden cane for winter. Others, after cutting the grain, use the grain field in summer, and in winter the corn and pea fields, with the various grasses and swamp cane. All the farmers keep cows, many of which are pure breed or one half and more pure breed.

In 1890 there were 4,796 cattle, of which 266 were working oxen. The milch-cows numbered 1,782 and produced 352,825 gallons of milk from which were made 79,233 pounds of butter. There are now two dairy farms doing a good business. The domestic fowls of the county numbered 51,972 and produced 99,606 dozens of eggs. The amount of honey gathered was 18,760 pounds in 1890. There were 726 horses, 2,361 mules, 5 donkeys and 16,072 swine.

In addition to the fact that most farmers raise vegetables, berries and melons in quantities sufficient for home consumption, there are four market gardens raising these things for sale. Two hundred acres are devoted to melons and the average net profit to the acre is \$10.00. The truck sold amounts to \$20,000. Sumter county has 54,691 peach-trees, 5,904 apple-trees, 2,000 pear-trees and 1,594 plum-trees. There are two small vineyards raising grapes mostly for home consumption.

There are also 2 small establishments raising flowers and flowering plants for the market.

The forests of the county have been badly cut over; but there is still considerable yellow pine, of which the annual output is worth about \$20,000. There are 7 sawmills in the county.

There is one flour-mill operated by water, and there are 14 grist-mills, 11 of which use water. Other manufactories of the county are a guano factory, cotton seed oil-mill, variety works, sash and blind factory, the Seaboard Air Line Railroad shops, a horse collar factory, an iron foundry, two wagon and buggy factories, all the above being located at Americus; one boot and shoe factory at Plains, and five smaller ones at Americus; one tannery at Plains, and one factory for repairing gins.

About 300 hands are employed at the Seaboard Air Line shops, and

100 in other industries of the city of Americus. This is a fine location for cotton-mills and canning, and men of enterprise and push are heartily welcomed by the cultured and refined society of this thriving Southwest Georgia city.

Americus is the county site and has a population of 7,647, or, including its surrounding district, 10,552. It has a fine system of public schools, a handsome court-house worth \$35,000, a jail valued at \$15,000, a postoffice three stories high with a marble front, a building containing a bank and several offices valued at \$50,000, two hotels, one valued at \$130,000, the other at \$25,000, water, gas, and electric works, worth \$50,000, four banks with a capital of \$300,000, an opera house and many elegant private residences, a handsome passenger depot, belonging to the Central of Georgia and Seaboard Air Line systems, and railroad shops valued at \$75,000. There are in the city 10 churches of the usual Christian denominations. Three lines of railroad center here: the Central of Georgia from Macon to Albany; another branch of the Central from Americus to Columbus, Georgia, and the Seaboard Air Line from Savannah, Georgia, to Montgomery, Alabama.

There are in Americus several prosperous business firms: five life and 4 fire insurance companies.

There are several places of resort near the city: Magnolia Dell, Myrtle Springs, Pavilion Bathing Pools, Holley Springs Bathing Pool, Schute Pavilion and Magnolia Mineral Springs.

Plains, on the Seaboard Air Line Railroad 10 miles west from Americus, is a good business point with a population of 346 in its corporate limits, while in the district which includes it are 2,521 inhabitants. It has fine schools and churches.

DeSoto, on the same railroad, 13 miles east of Americus, with 250 inhabitants in its corporate limits, does a good business and is well supplied with churches and schools.

Leslie, a place of 213 people, has similar advantages. The district including these two towns has 3,131 inhabitants.

Andersonville, 13 miles north of Americus, on the Central of Georgia Railway is noted as the point where a large Federal prison camp was located during the civil war. Here there is a well-kept Federal cemetery. It contains a population of 245 in its corporate limits, or 1,386 in its entire district.

Sumter is one of the best counties of Southwest Georgia. It has excellent facilities for travel and transportation, several busy little towns and the growing city of Americus. Its schools and churches are first-class; its people refined and cultivated. The sale of spirituous liquors is prohibited through the county; hence Americus and the other towns are quiet and orderly.

The excellent character of the schools of Americus has led many people to settle there on account of the superior educational advantages of that city.

The area of Sumter county is 534 square miles, or 341,760 acres.

Population in 1900, 26,212, a gain of 4,105 since 1890; school fund, \$12,112.61; Americus, \$4,452.74.

By the Comptroller-General's report for 1900 there are: acres of improved land, 294,768; of wild land, 283; average value per acre of improved land, \$5.11; of wild land, \$1.24; city property, \$1,529,380; shares in bank, \$187,665; money, etc., \$260,366; value of merchandise, \$343,026; stocks and bonds, \$2,298; cotton manufactories, \$29,730; iron works, \$2,600; household furniture, \$260,201; farm and other animals, \$250,638; plantation and mechanical tools, \$64,439; watches, jewelry, etc., \$26,313; value of all other property, \$68,935; real estate, \$3,036,066; personal estate, \$1,667,252. Aggregate value of whole property, \$4,703,318.

Property returned by colored taxpayers: number of acres of land, 13,639; value, \$90,902; stocks and bonds, \$8.00; city property, \$190,058; money, \$1,960; merchandise, \$3,945; household furniture, \$48,252; watches, etc., \$854; farm and other animals, \$47,902; plantation and mechanical tools, \$10,755; value of all other property, \$4,060. Aggregate value of whole property, \$464,463.

The tax returns for 1901 show a gain of \$236,144 in the value of all property since the returns of 1900.

According to the United States census of 1900 there were ginned in Sumter county 25,164 bales of upland cotton during the season of 1899-1900.

The public schools of the county number 23 for white pupils and 33 for colored, with an average attendance of 750 white pupils and 1,410 colored.

Population of Sumter county by sex and color, according to the census of 1900: white males, 3,716; white females, 3,683; total white, 7,399; colored males, 9,249; colored females, 9,564; total colored, 18,813.

Population of Americus City by sex and color by the census of 1900: white males, 1,490; white females, 1,523; total white, 3,013; colored males, 2,117; colored females, 2,544; total colored, 4,661.

Total population of Americus, 7,674.

Domestic animals in Sumter county in barns and inclosures, not on farms or ranges, June 1, 1900: 82 calves, 14 steers, 2 bulls, 238 dairy cows, 326 horses, 86 mules, 11 sheep, 558 swine, 7 goats.

TALBOT COUNTY.

Talbot County was laid out in 1827 and named for Hon. Matthew Talbot, who represented Oglethorpe county in the legislature for many years, and being president of the Senate at the time of the death of Governor Rabun on October 25, 1819, succeeded him in the gubernatorial chair until the election of John Clark, in November, 1819.

Talbot county is bounded on the north by Meriwether, on the north-east by Upson, on the east by Taylor, on the south by Marion and Muscogee, and on the west by Harris and Muscogee.



PACKING CANTALOUPE.

The Flint river flows along its northeastern boundary. Other streams are Patisliga, Hachasofkee and Lazer creeks. The Oak Mountains are in the northern section of the county.

The soil belongs to the metamorphic formation in the northern part, and to the cretaceous in the southern section. The face of the country is broken. There are brown and mulatto lands with red clay subsoil, hardwood growth and freestone water throughout the first division; gray, sandy or gravelly soil, with long-leaf pine and limestone water throughout the second division.

Counting all lands, the average production is as follows: corn, 11 bushels; oats, 9 bushels; rye, 7 bushels; barley, 10 bushels; wheat, 7 bushels; Irish potatoes, 75 bushels; sweet potatoes, 100 bushels; field-peas, 10 bushels; ground-peas, 15 bushels; seed cotton, 500 pounds; corn fodder, 250 pounds; crab-grass hay, 2,200 pounds; sorghum syrup, 50 gallons; sugar-cane syrup, 200 gallons. But with careful cultivation these same lands produce 20 bushels each of corn and oats; 15 bushels of field-peas and 25 of ground-peas, and 600 pounds of seed cotton.

After supplying the home demand for vegetables, berries, fruits and melons, there is enough surplus to make the truck sales amount to \$4,500. There are in Talbot county 39,246 peach-trees, 5,896 apple-trees, 2,640 plum-trees, 1,452 pear-trees and 450 cherry-trees.

According to the United States census of 1890 Talbot county had 453 sheep with a wool-clip of 1,232 pounds, 5,414 cattle, of which 204 were working oxen and 1,946 milch-cows, 596 horses, 1,684 mules, 4 donkeys and 8,138 swine. Among the farm products were 60,373 domestic fowls, 86,016 dozens of eggs, 370,462 gallons of milk, 88,012 pounds of butter and 23,151 pounds of honey.

The timber products are small, with an annual output worth about \$4,000.

According to the United States census of 1900 there were ginned in Talbot county 8,898 bales of upland cotton of the crop of 1899-1900.

On tributaries of the Chattahoochee 90 horse-powers are utilized by 4 grist-mills, while on the tributaries of the Flint river 9 mills utilize 169 horse-powers.

All the manufactories of the county number 14 and have an output worth \$32,474.

The largest town is Talbotton, with a population of 1,131 in its corporate limits, and 1,963 in the entire district, which includes it. This town is the county seat, and is located on Lazer creek. It has a high situation with invigorating air and good, cool water. Talbotton has a bank with a capital of \$28,000; a court-house worth \$20,000; 2 good schools, the Collinsworth Institute and Le Vert College; good church buildings of the Methodists, Baptists and Presbyterians, and a Masonic hall. It is connected by a branch railroad with the Southwestern branch of the Central of Georgia Railroad. It handles 6,000 bales of cotton annually. The county has 54 schools belonging to the public school system of Georgia, and is well provided with houses of worship, belonging to the leading Christian denominations.

Geneva, on the Central of Georgia Railway, has three sawmills and does a good mercantile business.

The area of Talbot county is 407 square miles, or 260,480 acres. Population in 1900, 12,197, a loss of 1,061 since 1890; school fund, \$10,042.17.

By the Comptroller-General's report for 1900 there are: acres of improved land, 229,990; of wild land, 5,859; average value per acre of improved land, \$2.69; of wild land, \$0.78; city property, \$106,520; shares in bank, \$17,065; money, etc., \$53,721; merchandise, \$40,760; stocks and bonds, \$75; cotton manufactories, \$11,000; value of household furniture, \$51,166; farm and other animals, \$93,338; plantation and mechanical tools, \$24,343; watches, jewelry, etc., \$3,002; value of all other property, \$18,284; real estate, \$729,194; personal estate, \$314,269. Aggregate value of whole property, \$1,043,463.

Property returned by colored taxpayers: number of acres, 8,441; value, \$19,980; city property, \$6,305; merchandise, \$175; household furniture, \$9,925; watches, etc., \$133; farm and other animals, \$18,204; plantation and mechanical tools, \$3,402; value of all other property, \$2,023. Aggregate value of whole property, \$60,147.

The tax returns for 1901 show an increase of \$53,533 in the value of all property since the returns of 1900.

Of the 54 schools 25 are for white pupils and 27 for colored, and the average attendance is 737 white pupils and 1,467 colored.

Population of Talbot county by sex and color, according to the census of 1900: white males, 1,765; white females, 1,893; total white, 3,658; colored males, 4,152; colored females, 4,378; total colored, 8,539.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 38 calves, 5 steers, 78 dairy cows, 51 horses, 15 mules, 176 swine, 5 goats.

TALIAFERRO COUNTY.

Taliaferro County was formed in 1825 from Wilkes, Warren, Hancock, Greene and Oglethorpe. An additional part was then taken from Hancock in 1828, and parts were taken from Wilkes in 1828 and 1835. It was named for Colonel Benjamin Taliaferro, who was born in Virginia, joined the Continental army when a mere youth, rose to captain and then to colonel, winning great distinction, and in 1785 settled in Georgia. He was a trustee of Franklin College (then the nucleus of the State University), president of the State Senate, and, though not a lawyer, was elected by the legislature one of the judges of the Superior Court, the only instance of the kind in the history of Georgia.

Taliaferro county is bounded by the following counties: Wilkes on northeast and north, Warren on the east and southeast, Hancock on the south, Greene on the west and southwest, and Oglethorpe on the northwest. Little river runs through a northwestern projection of the county and then along the north border, after which, turning to the east and northeast and flowing along the boundaries of five counties, it enters into

the Savannah river. Two branches, the North and South Forks of the Ogeechee river, cross the southern part of this county, running in a southeasterly direction. The lands on the streams, and especially on Little river, are excellent. The soils are partly red, partly gray, sandy and in some places a mixture of both.

With careful cultivation the lands in Taliaferro produce to the acre: corn, 15 bushels; oats and barley, each, 20 bushels; wheat, 10 bushels; rye, 5 bushels; Irish potatoes, 75 bushels; sweet potatoes, 80 bushels; field-peas, 10 bushels; ground-peas, 25 bushels; seed cotton, 750 pounds; crab-grass hay, 2,000 pounds; corn fodder, 300 pounds; sorghum syrup, 60 gallons; sugar-cane syrup, 75 gallons.

According to the United States census of 1900 there were ginned in this county 6,487 bales of upland cotton of the crop of 1899-1900.

The usual garden vegetables, berries, melons and fruits yield well.

According to the United States census of 1890 there were in Taliaferro county 313 sheep, with a wool-clip of 557 pounds; 2,668 cattle, of which 193 were working oxen and 1,117 milch-cows; 682 horses, 618 mules, 3 donkeys and 4,785 swine. Some of the farm products were 35,529 domestic fowls, 35,281 dozens of eggs, 7,703 pounds of honey, 249,604 gallons of milk, 72,935 pounds of butter and 130 pounds of cheese.

The public schools number 30, one half for white pupils, the other half for colored. Of the white pupils the average attendance is 363, and of the colored pupils 503.

The prevailing religious sects are Baptists, Methodists and Presbyterians. Churches for white and colored at convenient distances are scattered over the county, which is also well provided with schools.

Crawfordville, the county seat, near the center of the county on the Georgia Railroad, has a population of 597 in the town, and 900 in the entire district. It is noted as having been the home of Hon. Alexander H. Stephens, who was born about $2\frac{1}{2}$ miles from this town. His grandfather, Alexander Stephens, emigrated from England in 1750 and was present at Braddock's defeat. He took an early and active part on the patriot side in the war of the Revolution, and removing to Georgia in 1789 or 1790, settled on the plantation afterwards owned by his son, Andrew B. Stephens, and his grandson, Alexander Hamilton Stephens. Mr. Stephens' mother was Margaret Grier, sister of Robert Grier, the celebrated almanac maker in Georgia, and a distant relative of Justice Grier, one of the present judges of the Supreme Court of the United States. Liberty Hall, the home of Mr. Stephens, is in full view of the Georgia Railroad.

Other postoffices in the county are Hillman, Lyneville, Robinson and Sharon.

The area of Taliaferro county is 198 square miles, or 126,720 acres. Population in 1900, 7,912, a gain of 621 since 1890; school fund, \$5,255.23.

By the Comptroller-General's report for 1900 there are: acres of improved land, 115,872; average value per acre, \$3.02; city property, \$70,205; shares in bank, \$15,010; money, etc., \$40,796; value of mer-

chandise, \$28,985; stocks and bonds, \$7,353; cotton manufactories, \$150; household furniture, \$31,474; farm and other animals, \$70,154; plantation and mechanical tools, \$17,650; watches, jewelry, etc., \$2,970; value of all other property, \$20,523; real estate, \$420,920; personal estate, \$245,913. Aggregate value of whole property, \$666,833.

Property returned by colored taxpayers: number of acres, 7,099; value, \$22,009; city property, \$4,205; money, \$483; stocks and bonds, \$10; merchandise, \$528; household furniture, \$6,000; watches, \$110; farm and other animals, \$18,131; plantation and mechanical tools, \$3,875; value of all other property, \$841.00. Aggregate value of whole property, \$56,192.

The tax returns of 1901 show an increase of \$2,975 in the value of all property since the returns of 1900.

Population of Taliaferro county by sex and color, according to the census of 1900: white males, 1,179; white females, 1,212; total white, 2,391; colored males, 2,707; colored females, 2,814; total colored, 5,521.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 21 calves, 53 dairy cows, 19 horses, 1 mule, 76 swine, 11 goats.

TATTNALL COUNTY.

Tattnall County was formed from Montgomery county in 1801. Portions were given back to Montgomery county in 1812. It was named in honor of Josiah Tattnall, a man very influential in Georgia; a senator from Chatham county when the bill rescinding the Yazoo Act was passed; was elected to Congress and chosen governor in 1801, which office he resigned in 1802 on account of failing health.

Tattnall is bounded by the following counties: Bulloch and Bryan on the northeast, Liberty on the east and southeast, Wayne and Appling on the south, Montgomery and Emanuel on the west. The whole western border has an inclination northward. The Cannouchee river runs along the whole northeastern border. The Ochoopee river, a tributary of the Altamaha, runs from north to south almost through the center of the county. The Altamaha flows along the whole southern border. Among other streams are Hound and Dry creeks, tributaries of the Cannouchee, itself a tributary of the Ogeechee; Pendleton's, Rocky and Battle creeks, tributaries of the Ochoopee; Cobb's and Beard's creeks which empty into the Altamaha.

The upper part of the county is hilly, the lower part level. The soil is sandy, except along the streams, where it is thick.

Under good cultivation the average production to the acre is: corn, 20 bushels; oats, 15 bushels; sweet potatoes, 200 bushels; field-peas, 20 bushels; ground-peas, 100 bushels; seed cotton, 1,200 pounds; sea-island seed cotton, 700 pounds; corn fodder, 400 pounds; sugar-cane syrup, 200 gallons. Melons and every variety of vegetables are produced.

According to the United States census of 1900 there were ginned in

Tattnall county 952 bales of upland and 6,357 bales of sea-island cotton during the season of 1899-1900.

In 1890 Tattnall county had 13,885 sheep, with a wool-clip of 28,156 pounds; 19,642 cattle, 305 being working oxen, and 5,529 milch-cows, 956 horses, 778 mules and 23,437 swine. Some of the farm products were 54,263 domestic fowls, 73,398 dozens of eggs, 315,886 gallons of milk, 11,167 pounds of butter, 140 pounds of cheese, and 8,231 pounds of honey.

Lumber, rosin and turpentine give occupation to many of the people, who get their products into the markets of Darien and Savannah over the Seaboard Air Line.

The public school buildings number 68 for white pupils and 21 for the colored, with an average attendance of 1,976 white pupils and 621 colored.

Reidsville, situated on a high, sandy hill, four miles from the Ohoopsee river, is the county site. The Collins and Reidsville Railroad connects it with the Seaboard Air Line, while the Stillmore Air Line connects it with Stillmore in Emanuel county. Reidsville town has 257 inhabitants, but the population of the entire Reidsville district is 2,446.

Claxton town has 533 inhabitants, while the district including it contains a population of 3,085. The district which includes Glenville town has 2,423 inhabitants, 269 of whom are in the town.

The Lyons district has a population of 1,098, of whom 534 are in the town of that name.

Tattnall is considered one of the healthiest counties in Georgia.

The area of Tattnall county is 1,102 square miles, or 705,280 acres. Population in 1900, 20,419, an increase of 10,166 since 1890; school fund, \$12,043.24.

By the Comptroller-General's report for 1900 there are: acres of improved land, 509,964; of wild land, 36,603; average price per acre of improved land, \$2.02; of wild land, \$1.08; city property, \$220,629; money, etc., \$556,069; merchandise, \$166,888; household furniture, \$202,351; farm and other animals, \$436,517; plantation and mechanical tools, \$87,523; watches, jewelry, etc., \$12,920; value of all other property, \$322,103; real estate, \$1,750,481; personal estate, \$1,860,469. Aggregate value of whole property, \$3,610,950.

Property returned by colored taxpayers: number of acres, 7,516; value, \$59,810; city property, \$7,510; money, etc., \$2,926; merchandise, \$215; household furniture, \$17,609; watches, etc., \$418; farm and other animals, \$31,230; plantation and mechanical tools, \$4,620; value of all other property, \$9,715. Aggregate value of whole property, \$143,229.

The tax returns show an increase of \$101,795 in the value of all property over the returns of 1900.

Population of Tattnall county by sex and color, according to the census of 1900: white males, 6,917; white females, 6,389; total white, 13,306; colored males, 3,921; colored females, 3,192; total colored, 7,113.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 122 calves, 58 steers, 6 bulls, 168 dairy cows, 156 horses, 272 mules, 822 swine, 26 goats.

TAYLOR COUNTY.

Taylor County was formed from Talbot, Crawford, Macon, Monroe and Marion in 1852, and was named in honor of General Zachary Taylor, of Louisiana, a distinguished soldier of the Mexican war, and twelfth president of the United States. It is bounded by the following counties: Upson and Crawford on the northeast, Macon on the east, southeast and south, Schley on the south, Marion and Talbot on the west and Talbot on the northwest.

The Flint river flows along its whole northeastern boundary. Into the Flint river empties Parchelagee creek, after traversing the northern section of the county. White Water creek, after flowing in a southeasterly course, turns to the east for a few miles and then making another turn flows due south into Royal Cedar creek, which latter separates Taylor on the south from Macon and Schley counties.

The soil of Taylor county is in the main cretaceous, with irregular areas of the tertiary formation extending into the southern portion of the county, while the northern portion is metamorphic with red clay soil. Vegetation is consequently varied—hardwoods, yellow pine and swamp growth prevailing, according to location. In some sections the water is freestone, in others limestone.

These lands produce an average to the acre of 12 bushels of corn, 20 of oats, 6 of wheat, 5 of rye, 75 of Irish potatoes, 100 of sweet potatoes, 10 of field-peas, 30 of ground-peas, from 535 to 700 pounds of seed cotton, 4,000 pounds of crab-grass hay, 300 of corn fodder and 200 gallons of sugar-cane syrup.

The gardens and orchards produce well. Above home consumption there are sold about \$2,500 worth of truck annually. There are 37,320 peach-trees, 6,607 apple-trees, 1,610 plum-trees, and 1,203 pear-trees. While the peach crop is not so large as that of some of the neighboring counties, the fruit is especially fine and brings fancy prices in the northern and eastern markets.

While there are no dairy farms, the farmers own a great many cattle, among them some very fine cows. In 1890 the cattle numbered 4,686, the working oxen 355, and the milch-cows, 1,356. The yield of milk was 198,922 gallons, and the butter made on farms was 59,228 pounds, and the cheese, 100 pounds. All kinds of poultry aggregated 38,582, and the number of their eggs was 65,249 dozens. The honey gathered was 16,691 pounds. In 1890 Taylor county had 578 sheep, with a wool-clip of 2,018 pounds; 484 horses, 925 mules, 2 donkeys and 8,830 swine.

According to the census of 1900 there were ginned in Taylor county 8,371 bales of upland cotton of the crop of 1899-1900.

The timber products are small, amounting to \$6,000 annually.

On the tributaries of the Flint river 17 grist-mills utilize 264 horse-powers.

There are 10 other manufactories in the county, with an annual output of \$97,078. The new cotton-mill at Reynolds will add materially to this.

The public school buildings number 26 for white pupils and 16 for colored, and have an average attendance of 680 white pupils and 543 colored.

The Methodists and Baptists with numerous churches supply the people with religious advantages.

Butler, with a population of 707, on a branch of the Central of Georgia Railroad, is the county site. The Butler district, which includes the town, contains 3,083 inhabitants.

Reynolds, on the same railroad, is in the eastern section of the county. The Reynolds district contains a population of 2,199, of whom 436 are in the town.

The area of Taylor county is 338 square miles, or 216,320 acres. Population in 1900, 9,846, an increase of 1,180 since 1890; school fund, \$6,451.96.

By the Comptroller-General's report for 1900 there are: acres of improved lands, 216,384; of wild lands, 17,943; average price per acre of improved land, \$2.08; of wild land, \$0.52; city property, \$72,730; shares in bank, \$16,000; money, etc., \$50,242; value of merchandise, \$36,020; stocks and bonds, \$1,100; cotton manufactories, \$90,000; household furniture, \$55,780; farm and other animals, \$93,212; plantation and mechanical tools, \$21,116; watches, jewelry, etc., \$2,488; real estate, \$532,148; personal estate, \$398,268. Aggregate value of whole property, \$930,416.

Property returned by colored taxpayers: number of acres, 7,385; value, \$12,074; city property, \$2,790; money, etc., \$144; merchandise, \$40; household furniture, \$7,162; watches, etc., \$54; farm and other animals, \$8,949; plantation and mechanical tools, \$1,833; value of all other property, \$344.00. Aggregate value of whole property, \$35,525.

The tax returns for 1901 show an increase of \$13,765 in the value of all property over the returns of 1900.

Population of Taylor county by sex and color, according to the census of 1900: white males, 2,386; white females, 2,434; total white, 4,820; colored males, 2,428; colored females, 2,598; total colored, 5,026.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 13 calves, 3 steers, 1 bull, 13 dairy cows, 28 horses, 6 mules, 2 sheep, 136 swine, 13 goats.

TELFAIR COUNTY.

Telfair County was laid out in 1807. A part of it was added to Montgomery in 1812 and other parts to Montgomery in 1820. A part was taken from Appling and added to Telfair in 1819, and in 1854 a part of Telfair was given to help form Coffee county. The county of Telfair was named in honor of Hon. Edward Telfair, a native of Scotland, who emigrated to Virginia and then to Georgia, engaging in commercial pursuits at Savannah. He was conspicuous throughout the Revo-

lution by his patriotic zeal; represented Georgia in the Continental Congress, and in behalf of his State signed the ratification of the Articles of Confederation; after the war was one of the commissioners appointed by the governor to make a treaty with the Cherokee chiefs; was governor of Georgia from the 9th of January, 1786, to the 9th of January, 1787; and again from the 9th of November, 1790, to the 7th of November, 1793. While governor the second time he entertained General Washington at the Grove, his family residence near Augusta, on the occasion of the visit of his Excellency to Georgia.

Telfair county is bounded by the following counties: Montgomery on the northeast, Coffee on the southeast, Coffee and Irwin on the south, Wilcox on the southwest and Dodge on the northwest. Little Ocmulgee river separates it from Montgomery county, the Ocmulgee from Coffee, Irwin and Wilcox counties, Sugar, Turnpike and Cedar creeks all flow across the county and empty into the Ocmulgee river.

The face of the country is level. The soil is sandy, with clay subsoil. Under ordinary methods of cultivation the average yield of the various crops to the acre is: corn, 15 bushels; oats, 15; rye, 10; Irish potatoes, 75; sweet potatoes, 200; field-peas, 10; ground-peas, 15; chufas, 30; rice, 10; millet, 10; seed cotton, 500 pounds; crab-grass hay, 1,500 pounds; sugar-cane syrup, 200 gallons. The best lands with good cultivation will produce to the acre: corn, 25 bushels, oats, 30; rye, 20; Irish potatoes, 100; sweet potatoes, 250; field-peas, 15; ground-peas, 25; chufas, 50; rice, 20; millet, 200; upland seed cotton, 1,500 pounds; sea-island seed cotton, 800 pounds; crab-grass hay, 2,000 pounds; corn fodder, 500 pounds; sugar-cane syrup, 375 gallons.

Crab, crowfoot and wire-grasses furnish good hay and also ample pasturage for stock. Wheat bran, cotton seed meal and peas are also used for feeding stock. Fifty per cent. of the fertilizers used is produced on the farm, while 80 per cent. of the cotton seed raised is returned to the land as a fertilizer, either in the form of cotton seed meal or as green seed.

There is considerable improvement in the breeds of cattle, and yet only a few beef cattle are raised, except on the range. In 1890 Telfair county had 14,873 sheep, with a wool-clip of 9,704 pounds, 5,349 cattle, 428 being working oxen and 1,468 milch-cows; 355 horses, 267 mules, 1 donkey, 7,659 swine, 14,343 domestic fowls, and by a later estimate, 500 goats. Some of the products of the farms were 86,305 gallons of milk, 4,978 pounds of butter, 985 pounds of honey and 21,007 dozens of eggs.

There are about 25 market gardens in the county selling about \$3,000 worth of truck above home consumption. About 500 acres are devoted to melons, the net profit on which is \$15 to the acre. The principal fruits are peaches, apples, plums and pears.

There is a large business in rosin, turpentine, lumber, shingles, etc. The annual output of lumber is about 100,000,000 superficial feet, at \$10 a thousand feet. About 15 sawmills and ten turpentine distilleries are in operation. There are 20 grist-mills, 3 operated by water and 17

by steam. There is an ice factory at McRae, also a wagon and buggy factory. There are also two box and barrel factories.

The county site is McRae, a flourishing little town on the Southern Railway. McRae district has a population of 1,678, of whom 1,020 are in the corporate limits of the town. Here is the South Georgia College, under the auspices of the South Georgia Conference of the M. E. Church (South), a flourishing institution with about 300 pupils. There are altogether in the county about 100 schools, public and private. The public schools number 38 for white pupils and 13 for colored, with an average attendance of 653 in the white and 600 in the colored schools.

There are several small towns and postoffices in the county: Clayville, China Hill, Cobbville, Elmina, Fentress, Helena, Jacksonville, Lumber City, Milan, Neily, Oswald, Poplar Hill, Scotland, Temperance Town and Wootten's Mill.

Lumber City district has 1,326 inhabitants, of whom 760 live in the town. Helena district has 975 inhabitants, 604 of whom are in the town.

About 5,000 cotton bales are shipped from the entire county, which enjoys both railroad and water transportation. According to the United States census of 1900, there were ginned in Telfair county 2,324 bales of upland and 217 of sea-island cotton of the crop of 1899-1900.

The area of Telfair county is 412 square miles, or 263,680 acres. Population in 1900, 10,083, a gain of 4,406 since 1890; school fund, \$6,213.15.

By the Comptroller-General's report for 1900 there are: acres of improved land, 143,525; acres of wild land, 136,258; average price to the acre of improved land, \$2.16; of wild land, \$1.15; city property, \$204,002; money, etc., \$67,973; merchandise, \$78,180; capital invested in shipping, \$7,002; iron works, \$915; household furniture, \$64,726; farm and other animals, \$111,107; plantation and mechanical tools, \$14,632; watches, jewelry, etc., \$5,420; value of other property, \$37,250; real estate, \$673,318; personal estate, \$403,105. Aggregate value of whole property, \$1,076,423.

Property returned by colored taxpayers: number of acres, 10,401, value, \$20,286; city property, \$7,889; money, etc., \$200; merchandise, \$65; household furniture, \$5,760; watches, jewelry, etc., \$117; farm and other animals, \$9,662; plantation and mechanical tools, \$1,132; value of all other property, \$1,483. Aggregate value of whole property, \$46,594.

The tax returns for 1901 show an increase of \$200,934 in the value of all property over the returns of 1900.

Population of Telfair county by sex and color, according to the census of 1900: white males, 3,054; white females, 2,903; total whites, 5,957; colored males, 2,138; colored females, 1,988; total colored, 4,126.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 257 calves, 167 steers, 6 bulls, 331 dairy cows, 110 horses, 91 mules, 1 donkey, 74 sheep, 928 swine and 40 goats.

TERRELL COUNTY.

Terrell County was formed from Lee and Randolph in 1856, and was named for Dr. Wm. Terrell of Hancock county, who at one time represented his county in the legislature and was a member from Georgia of the House of Representatives at Washington from 1817 to 1821. It is bounded by the following counties: Webster and Sumter on the north, Lee on the east, Dougherty and Calhoun on the south and Randolph on the west. Kinchafoonee creek forms a part of its northeastern and eastern boundary, and Ichawaynochaway creek part of the western boundary. Other streams are Chickasawhatchee, Turkey and Chenubee creeks. The water is in some parts freestone, in others, limestone.

The soil belongs to the tertiary formation, and is a gray, sandy loam with red outcrops in places. The face of the country is level or slightly undulating. The forest growth is yellow pine on gray lands; oak and hickory on red lands, with the usual swamp growth; white oak, ash, maple, sycamore, poplar, gum and magnolia on streams.

The average yield of the various crops to the acre under ordinary methods of production is: corn, 10 bushels; oats, 13 bushels; wheat and rye, 8 bushels each; Irish and sweet potatoes, 100 bushels each; sugar-cane syrup, 206 gallons; sorghum forage, 4,000 pounds; seed cotton, 650 pounds. But many of the farmers under more scientific culture make as an average to the acre: corn, 15 bushels; oats, 35 bushels; wheat, 13 bushels; sugar-cane syrup, 300 gallons; seed cotton, 800 pounds. Crab-grass and peavines are the chief reliance for hay, and frequently make 4,000 pounds to the acre. Amber cane is extensively used for a forage crop. Bermuda grass also does well, and so does the velvet bean, though it is not planted to any great extent. Crab-grass makes good pasturage for seven months of the year and bermuda grass for nine. The Jersey is the favorite milch-cow. Near Dawson is a successful dairy farm.

In 1890 there were in the county 4,208 cattle, of which 134 were working oxen, and 1,304 were milch-cows, which yielded 187,767 gallons of milk, from which were made 64,944 pounds of butter. The domestic fowls of every variety numbered 54,641, and produced 103,281 dozens of eggs. The honey collected amounted to 17,100 pounds. In 1890 there were in Terrell county 365 sheep, with a wool-clip of 459 pounds, 438 horses, 1,634 mules, and 12,405 swine.

There are no regular market gardens, but some of the farmers make a business of selling vegetables, berries and small fruits. The amount of truck sold amounts to about \$5,000 worth.

Fine melons are raised. The acreage for the past season was about 200 acres. The net profit to the acre was \$35.00.

The peach crop pays well. Other fruits are not produced in sufficient quantities to warrant a statement of what they can do. There are in the county 11,250 peach-trees and 500 apple-trees. Not many grapes are raised for the market. The Concord and other varieties do well. The

Scuppernong is indigenous to Terrell, as well as to many other counties of Georgia.

There are about 50,000 acres of yellow pine, but most of it has been sawed over. There is an annual output of 7 or 8 million superficial feet at about \$9.00 a thousand feet.

There is some sandstone, but none of it is being quarried.

There are in Terrell county 12 grist-mills, 5 operated by water and 7 by steam. All of the 9 sawmills use steam. Other manufactories are: three of builder's supplies, two of coffins, one of carriages and buggies, one turpentine distillery, and one cotton seed oil-mill. The annual output of all these manufactories is \$200,000. The tributaries of Flint river furnish 56 horse-powers utilized by 5 grist-mills.

Dawson, the county site, is a growing city of 2,926 inhabitants, with excellent schools and churches of the Methodists, Baptists, Presbyterians and Lutherans. It has two banks with a combined capital of \$113,000; a good system of water-works, and electric light plant; a paid fire department; a court-house and other public buildings worth \$54,000; several flourishing mercantile establishments, life and fire insurance agencies and four of the manufacturing establishments mentioned above. At Dawson two lines of railway, one a branch of the Central of Georgia, the other of the Seaboard Air Line system, cross each other, the former traversing the county from northeast to southwest, the latter from northwest to southeast. In the district which includes the town there are 6,036 inhabitants. The public roads of the county are in fine condition. Its products are marketed principally at Dawson, but a small percentage goes to Parrott, Bronwood and Sasser.

Other post-offices and towns besides those already mentioned are: Cottondale, Herod, Duvall and Graves Station. There is a free mail delivery all over the county.

The entire receipts and shipments of cotton from the county are 26,000 bales. Of these Dawson handles 17,000 bales. According to the United States census of 1900, there were ginned in Terrell county 25,719 bales of upland cotton of the crop of 1899-1900.

The area of Terrell county is 340 square miles, or 217,600 acres. Population in 1900, 19,023, a gain of 4,520 since 1890; school fund, \$12,215.35.

By the Comptroller-General's report for 1900 there are: acres of improved land, 206,617; of wild land, 202; average price per acre of improved land, \$4.80; of wild land, \$0.40; city property, \$417,892; shares in bank, \$67,500; money, etc., \$279,684; merchandise, \$107,658; stocks and bonds, \$250; cotton manufactories, \$1,738; iron works, \$100; household furniture, \$127,859; farm and other animals, \$191,852; plantation and mechanical tools, \$45,547; watches, jewelry, etc., \$8,507; value of all other property, \$78,623; real estate, \$1,425,170; personal estate, \$924,818. Aggregate value of whole property, \$2,394,988.

Property returned by colored taxpayers: number of acres, 10,518;

value, \$45,468; city property, \$18,082; money, \$50; merchandise, \$275; household furniture, \$30,624; watches, etc., \$404; farm and other animals, \$32,040; plantation and mechanical tools, \$7,051; value of all other property, \$2,439. Aggregate value of whole property, \$136,433.

The tax returns for 1901 show an increase of \$245,853 in the value of all property since 1900.

The public schools of Terrell county number 24 for white pupils, and 24 for colored, with an average attendance of 689 white pupils and 851 colored.

Population of Terrell county by sex and color, according to the census of 1900: white males, 2,913; white females, 2,761; total white, 5,674; colored males, 6,536; colored females, 6,813; total colored, 13,349.

Population of the city of Dawson by sex and color, according to the census of 1900: white males, 615; white females, 609; total white, 1,224; colored males, 778; colored females, 924; total colored, 1,702.

Total population of Dawson, 2,926.

Domestic animals in Terrell county in barns and inclosures, not on farms or ranges, June 1, 1900: 12 calves, 7 steers, 2 bulls, 204 dairy cows, 147 horses, 40 mules, 235 swine, 5 goats.

THOMAS COUNTY.

Thomas County was formed from Decatur and Irwin in 1825, and a part of Lowndes was added to it in 1826. It was named in honor of Jett Thomas, who was captain of artillery in the army of General Floyd at the battles of Antossee and Chalibbee. He was born in Virginia in 1777, and died in Milledgeville, Georgia, of cancer in 1815.

Thomas county is bounded on the north by Mitchell and Colquitt, east by Brooks county, south by the State of Florida, and west by Decatur county. The Ocklockonee river, from the northeast to the southwest corner is the principal stream. The county lies on the backbone of an elevated ridge, which extends across the State from northeast to southwest. It slopes eastward and westward and from the watershed thus formed flow numerous creeks and smaller, limpid streams. From the hill-sides burst numerous springs, from which flow branches of clear water. In every part of the county wells of good freestone water are easily dug. In many sections the surface is level, in others undulating. Some parts of the county are rather hilly. The soil varies greatly and some close observers say that no fifty acres are exactly alike. The greater part of it is a gray, sandy loam, with a red clay subsoil, while some of it is of a yellow, sandy clay formation. There are lands of black muck, very fertile, as well as lands of pure sand, that are nearly useless for agricultural purposes. The prices vary from \$2 to \$10 an acre, according to location, quality and improvements. An average farm can be purchased at from \$5 to \$6 an acre. The principal crops are cotton, both long and short-staple, sugar-cane, sweet and Irish potatoes, peas of every variety, all the common vegetables, and many kinds of grasses. Crab is almost



PICKING TOMATOES.

the only grass cultivated in Thomas county for hay, being cut after other crops, especially after melons. When cultivated for hay exclusively it produces from 4,000 to 8,000 pounds to the acre. On some lands the yield to the acre under ordinary methods of cultivation is as follows: corn, 9 bushels; oats, 10 to 12 bushels; rye, 10 bushels; sorghum-syrup, 100 gallons; sugar-cane syrup, 300 gallons; Irish potatoes 100 bushels; sweet potatoes, 150 bushels; seed cotton, 400 pounds. On other lands under a proper system of cultivation the yield to the acre is as follows: corn, 20 to 30 bushels; oats, 20 bushels; rye, 20 bushels; barley, 40 bushels; Irish and sweet potatoes, 200 bushels each; field-peas, 25 bushels; ground-peas, 40 bushels; upland seed cotton, 600 pounds; sorghum syrup, 250 gallons; sugar-cane cyrup, 400 gallons.

The native grasses (wire and sedge), burned off in spring and growing up luxuriantly form the principal summer pasturage, which is supplemented by the cane brakes. In winter the preferred food for cattle consists of cotton seed meal and hulls with hay made from the native grasses. Some attention is given to the improvement of beef cattle. The improvement in milch-cows is marked, the Jersey predominating. There are 4 dairy farms with a capacity of 200 gallons of milk a day.

In 1890 there were in Thomas county 16,354 cattle, of which there were 694 working oxen and 4,584 milch-cows. Of the cows, 672 were of improved breeds. The milk produced amounted to 442,092 gallons, the butter to 79,252 pounds, and the cheese to 1,018 pounds. The sheep numbered 3,511 and yielded 7,545 pounds of wool. There were 84,309 domestic fowls producing 138,793 dozens of eggs. The honey gathered amounted to 7,139 pounds. There were 1,916 horses, 1,482 mules, 8 donkeys and 25,720 swine.

The county has wild turkeys and quail for those who fancy hunting, and the many streams furnish black bass and perch to reward the labors of the fisherman.

The fruits consist principally of pears, peaches, apples, plums, strawberries, figs, grapes and watermelons.

The vegetables are all the varieties common to this country. The products of the market gardens over and above home consumption amount to somewhere near \$3,000 worth. About 200 acres are devoted to grapes cultivated for home use.

A good portion of the county is still covered with original forest growth and consists mainly of yellow pine, various kinds of oak, hickory, poplar, magnolia, gum, beech and others. About 35 lumber and saw-mills, all run by steam, are employed in sawing the timber and preparing it for manufacturing purposes.

There are in Thomasville railroad shops of the Plant System, 3 shops for repairing vehicles, 2 sash and blind factories, and one foundry. In Thomasville and other towns are 10 or 12 shops where shoes are repaired and made. In the county are 12 turpentine distilleries. There are 3 grist-mills and ginneries run by water-power.

Thomasville, the county site, is a flourishing city with a population of 5,322, or, including the district, 9,172. It has three banks with an ag-

gregate capital of \$250,000; first-class hotels, a fine system of public schools, two colleges, and churches of the Methodist, Baptist, Presbyterian, Episcopalian, Bible Christian and Roman Catholic denominations. It is well lighted by gas and electricity and has water-works and a system of sewerage. The natural drainage is perfect, the water running off in every direction. The streets are broad, well-kept, and in many places shaded with native trees. It is noted for its beautiful flowers which bloom every month of the year. There are 2 florists establishments, each with an annual sale of \$1,000 worth of flowers and flowering plants. Two branches of the Plant System cross each other at Thomasville. The Tifton, Thomasville and Gulf Railroad also has its southern terminus here.

Other growing towns of the county are: Boston, with a bank which has a capital of \$25,000; Cairo, also having a bank with a capital of \$25,000; Ocklockonee, Metcalf, Meigs, Pavo and Pidcock.

The district of Boston has 3,663 inhabitants, of whom 722 reside in the town. Cairo district has 4,400 people, of whom 690 are in the town. The Meigs district contains 1,252 people, of whom 617 are residents of the town.

The public roads of the county are in good condition, and there are beautiful drives in and around Thomasville.

Thomas and Decatur counties are extensively engaged in the manufacture of syrup from the sugar-cane.

Cairo has become the center of the syrup trade of Georgia, shipping in one year 10,000 barrels, valued at something over \$100,000. The leaders in this industry are Mr. J. Byron Wight and his two brothers. While the syrup industry was still in its infancy Mr. Wight, at that time a school-teacher, was forced by ill health to seek employment in the open air. He began to study the best methods of syrup making and was aided in his efforts by his two brothers, who were merchants. The result has been a vast improvement in Georgia syrup, for which there is a rapidly increasing demand. The improvements introduced have led to the intention of establishing first-class sugar refineries, which would bring Georgia to the front as a syrup and sugar-producing State.

Major Purse of Savannah, is one of the most zealous promoters of this great industry. He and Colonel James, with Mr. Wight and others, have made trips to Louisiana for the purpose of obtaining information. The great railway lines, the Central of Georgia, the Southern and the Plant Systems, are taking a lively interest in the promotion of cane-growing.

Many of the best farmers of this section think 600 gallons of good syrup to the acre, under proper care and cultivation, a conservative estimate, while some have made as high as 750 gallons to the acre at a time when there was no market for it.

A large, thoroughly up-to-date sugar refinery would insure an enormous increase in cane culture with an accompanying prosperity such as

donkeys, 4,731 swine and 37,374 domestic fowls of various kinds. Among the products were 268,033 gallons of milk, 61,673 pounds of butter, 29,914 dozens of eggs and 9,590 pounds of honey. There is abundance of mountain trout in the streams, and in the mountains some game, such as bear, deer, turkey, wolves and panthers.

There are about 75,000 acres of forest land, mostly in hardwoods. The most valuable species are oak, hickory, poplar, walnut, chestnut, cherry, Lynn birch, maple, ash and locust. The price of the timber is from \$8 to \$10 a thousand feet. There are 3 sawmills getting out timber for the home supply.

The mountain streams afford abundance of water-power, varying at different points from 1 to 1,000 horse-powers.

There are some few small flour-mills and grist-mills scattered through the county, grinding for the county custom, probably about 30, all but 3 of which are operated by water.

There is one tannery. The people are anxious for manufactories, especially such as will work up their hardwoods, which are very valuable.

There is abundance of granite and serpentine gneiss for building and other uses. Gold is mined to some extent. Iron, chrome and magnetite, manganese, asbestos, talc, ochre, yellow and red plumbago, buhr, some gems and plenty of corundum are found. A very large plant is now being constructed at a cost of \$100,000 at Tate City, in the eastern part of the county for mining corundum.

Hiawassee, the county site, has several successful mercantile establishments. A new court-house is being built at a cost of \$8,000.

Other post-offices are Mountain Scene, Osborn, Visage, Welch and Young Harris. At this latter place is a fine school endowed by Young L. G. Harris, of Athens, Georgia, and under the control of the North Georgia Conference of the Methodist Episcopal Church, South. Here young men and young ladies of limited means can obtain an education at the least possible expense. There is also at Hiawassee a good school under the patronage of the Baptists. Methodists and Baptists are the leading Christian sects. Their churches are scattered at convenient distances throughout the county. There are some 26 schools of the public school system, with an enrollment of 1,350 pupils. Of these 23 are for whites and one for colored. The average attendance is 790 white pupils and 14 colored.

Murphy, North Carolina, is the nearest railroad town. In this and several Georgia towns the products of the county are marketed.

The area of Towns county is 168 square miles, or 107,520 acres. Population in 1900, 4,748, a gain of 684 since 1890; school fund, \$3,210.80.

By the Comptroller-General's report for 1900 there are: acres of improved land, 91,712; of wild land, 23,241; average value of improved lands to the acre, \$1.91; of wild lands, \$0.45; city property, \$20,095; money, etc., \$40,815; merchandise, \$16,450; capital invested in mining, \$210; household and kitchen furniture, \$19,140; farm and other animals, \$61,099; plantation and mechanical tools, \$9,641; watches, jew-

elry, etc., \$716; value of all other property, \$4,716; real estate, \$219,339; personal estate, \$163,754. Aggregate value of whole property, \$383,093.

Property returned by colored taxpayers: number of acres of land, 360; value, \$125.00; money, \$60.00; household furniture, \$55.00; farm and other animals, \$169.00; plantation and mechanical tools, \$5.00; value of all other property, \$4.00. Aggregate value of whole property, \$424.00.

The tax returns for 1901 show a decrease of \$23,379 in the value of all property since 1900.

Population of Towns county by sex and color, according to the census of 1900: white males, 2,341; white females, 2,336; total white, 4,677; colored males, 38; colored females, 33; total colored, 71.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 1 dairy cow, 14 horses, 11 mules.

TROUP COUNTY.

Troup County was laid out in 1826. A part was set off to Harris in 1827, and a part to Heard in 1830. It was named for Hon. George M. Troup, who was born at McIntosh's Bluff on the Tombigbee, in what was at that time a part of Georgia, but is now within the limits of the State of Alabama. He attended school in McIntosh county, Georgia, and then in Savannah, later still at a celebrated academy on Long Island, New York, was graduated at Princeton College, New Jersey, and returning to Savannah studied law in that city. He held many important offices, viz.: in the legislature, in Congress as representative and senator, and as governor of Georgia. It was in this latter capacity that he successfully maintained the rights and honor of Georgia in a controversy with the general government concerning the Creek lands.

Troup county is bounded on the north by Coweta county, and on the northwest by Heard, on the east by Meriwether, on the south by Harris, and on the west by the State of Alabama. The Chattahoochee river, entering the county on the northwest, flows toward its southwest corner, from which point it becomes the boundary line between Alabama and Georgia. There are also numerous creeks, tributaries of the Chattahoochee, among the chief of which are Yellow Jacket and Wehadka.

The land is rolling, well-watered and productive, embracing the varieties of soil peculiar to most of the counties of the Middle Georgia belt. With proper tillage much of it will yield to the acre: corn, 15 bushels; oats, 20; wheat, from 10 to 15 bushels; rye, 12 bushels; barley, 20 bushels; Irish potatoes, 100, and sweet potatoes, 125 bushels; field-peas, 20 bushels; ground-peas, 25 bushels; seed cotton, 1,000 pounds; hay made from bermuda, or crab-grass, or clover, 3,000 pounds; corn fodder, 300 pounds; shredded corn, 3,000 pounds; sorghum forage, about the same; sorghum syrup, 200 gallons. The red lands of the county are fertile, producing, besides all the crops named above, a great variety of garden vegetables. Melons and berries are plentiful and of the best quality.

Luscious grapes are raised for home consumption. The lands are also well adapted to peach-growing and to pears, plums and cherries.

Considerable attention is paid to the improvement of the breeds of cattle, both for the dairy and for beef. Nearly one-fourth of the cows belong to the higher grades. In 1890 Troup county had 5,077 cattle, of which 196 were working oxen and 2,306 were milch-cows, producing 695,265 gallons of milk, from which were made 224,192 pounds of butter. The domestic fowls numbered 70,773, and produced, 162,055 dozens of eggs. From the bee-hives were collected 20,539 pounds of honey. The county had 879 horses, 2,152 mules, 4 donkeys, and 8,526 swine. There were 223 sheep yielding 462 pounds of wool.

There is excellent timber available for manufacturing purposes, such as yellow pine, oak, maple, hickory, sweet-gum, poplar, etc.

LaGrange, the county site, is a growing city seventy-one miles southwest of Atlanta. The LaGrange district, which includes the city, contains 6,297 inhabitants, and in the corporate limits the city has a population of 4,274. At a height of 850 feet above sea level and with a natural drainage that insures freedom from malaria, LaGrange enjoys an excellent reputation for healthfulness. Beautiful flower gardens are found in all portions of the city, among the most noted being "The Terraces" or Ferrell Garden, at its western limit. The streets are wide and beautifully shaded with water oaks and elms. It is a place of great culture and refinement, the seat of two noted colleges for ladies; the Southern Female (Baptist) College and the LeGrange Female College, owned by the North Georgia Conference of the Methodist Episcopal Church, South; also of the Park High school for boys, and several other private schools. It has also an excellent public school system.

There are two Methodist, two Baptist, one Episcopalian and two Presbyterian churches.

An excellent system of water-works furnishes abundance of water for all purposes. The streets are lighted by electricity. There are two banks with a combined capital and surplus of \$300,000.

There are three cotton-mills owned and operated by home people, with an aggregate of 454 looms, 31,600 spindles and a combined capital of \$532,400. They manufacture sheeting, shirting, drills, osnaburgs, duck, and a variety of white cotton goods. These factories are the LaGrange Mills, the Dixie Mill and the Troup Factory.

Other manufactories are: a cotton oil-mill, of large capacity, a ginney, a guano factory, a foundry and machine shop, two planing-mills and variety workshops, two buggy and wagon factories, a grist-mill and a successful creamery and cheese factory.

Through the work of the creamery there are now (1901) more than 300 Jersey cows in the vicinity of LaGrange. More than fifty farmers furnish milk to this creamery and some of them make as much as \$165.00 a month. The butter from this creamery took the World's Fair prize at the Paris exposition of 1900, and won the Biltmore prize at the dairy exposition held the same year in Atlanta.

Surrounding LaGrange are many elegant suburban homes, stock

farms, dairy farms, orchards and vineyards. The farms are well supplied with wood and water.

Bermuda grass furnishes pasturage for nine months of the year, and on some of the farms yields from three to six tons to the acre. Well located farm lands can be purchased at from \$10 to \$20 per acre.

Good manufacturing sites are abundant.

The second largest place in Troup County is the thriving city of West Point, 87 miles from Atlanta, with a population of 1,797 in its corporate limits and in the whole West Point district, 3,086. The city owns its water-works and electric light plant, and has an excellent public school system. It is well supplied with churches of the Methodist, Baptist and Presbyterians. It has three cotton-mills with an aggregate of 1,180 looms and 44,000 spindles, and a monthly pay-roll of \$20,000. They manufacture duck, sateens, sheetings, drills and osaburga. West Point has also a cotton oil-mill, a brick plant, a tannery, an iron foundry and machine shops.

The town of Hogansville, with a population of 893 in the corporate limits, or 2,663 in the Hogansville district, which includes the town, has a cotton factory, a cotton oil-mill, a brick plant, a guano factory, a harness factory, grist-mill and ginnery. There are good schools and Methodist, Baptist and Presbyterian churches.

Other postoffices in Troup county are Antioch, Long Cane, Asbury, Troup Factory, Vernon and Mountville.

The Mountville district has 1,918 inhabitants, of whom 224 live in the town of Mountville.

All Troup county is well supplied with churches and schools.

In the 36 public schools for white children there is an average attendance of 1,009 pupils, and in the 40 for colored, 1,314 pupils.

The two colleges in LaGrange and the Park High school are for whites exclusively.

The white and colored races in every county of Georgia attend separate schools.

The county is traversed from northeast to southwest by the Atlanta and West Point Railroad, and from east to west by the Macon and Birmingham Railroad. These two roads cross each other at LaGrange.

On the first named are Hogansville and West Point, on the latter, Mountville.

According to the United States census for 1900 there were ginned in Troup county 21,550 bales of upland cotton during the season of 1899-1900.

The area of Troup county is 434 square miles, or 277,760 acres. The population by the census of 1900 was 24,002, a gain of 3,279 over 1890. According to the report of the Commissioner of Education for 1900, the school fund was \$15,672.47.

By the Comptroller-General's report for 1900 the property returned was: acres of improved land, 268,983; average value per acre, \$4.06; city property, \$922,459; shares in bank, \$275,000; money and solvent debts, \$268,800; merchandise, \$237,071; stocks and

bonds, \$105,965; cotton manufactories, \$329,800; household and kitchen furniture, \$151,535; farm and other animals, \$178,240; plantation and mechanical tools, \$46,997; watches, jewelry, etc., \$14,131; value of all other property, \$146,817; real estate, \$2,013,788; personal estate, \$1,894,328. Aggregate value of whole property, \$3,908,116.

Property returned by colored taxpayers: number of acres, 8,659; value of land, \$35,491; city property, \$38,996; money, etc., \$865; merchandise, \$280; household and kitchen furniture, \$15,129; watches, jewelry, etc., \$301; farm and other animals, \$29,108; plantation and mechanical tools, \$6,255; value of all other property, \$1,401. Aggregate value of whole property, \$131,871.

The tax returns for 1901 show an increase of \$273,980 in the value of all property as compared with the returns of 1900.

Population of Troup county by sex and color, according to the census of 1900: white males, 4,267; white females, 4,401; total white, 8,668; colored males, 7,445; colored females, 7,889; total colored, 15,334.

Population of the city of LaGrange by sex and color, according to the census of 1900: white males, 1,179; white females, 1,368; total white, 2,547; colored males, 767; colored females, 960; total colored, 1,727.

Total population of LaGrange, 4,274.

Domestic animals in Troup county in barns and inclosures, not on farms or ranges, June 1, 1900: 116 calves, 8 steers, 2 bulls, 298 dairy cows, 324 horses, 33 mules, 3 donkeys, 6 sheep, 567 swine, 10 goats.

About six or eight miles west of LaGrange, on the west bank of the Chattahoochee river, where the Wehadka creek empties into that stream, there once stood a village belonging to the Muscogeas, a tribe of the Creek Indians. This was the meeting point where the marauding parties met to plan some murderous foray upon the unprotected settlers of the frontier. It was after one of these predatory excursions that the warriors of the nation had assembled to celebrate the Green Corn Dance preparatory to another bloody raid.

A few hundred men under the command of Major Adams, who had volunteered to strike a blow at the savages, had arrived one evening in 1793, within a few miles of the river.

While they were in waiting for night, so that under cover of the darkness, they might surprise the enemy, Major Adams, accompanied by a private soldier named Hill, started to swim the Chattahoochee in order to reconnoiter the position of the enemy. Hill, who came near being drowned, was rescued by the Major, who then, after encountering many perils, gained the desired information and returned to his command. Leading his men across the river at a favorable point, he completely surprised the Indians, of whom scarcely a warrior escaped. As far as possible the women and children were spared. The Indian town was completely destroyed. For many years posts still standing in the midst of the saplings that had grown up among the ruins pointed out to the traveler the place where formerly stood the Burnt Village.

TWIGGS COUNTY.

Twiggs County was formed from Wilkinson in 1809, and a part of it was added to Bibb in 1833. It was named in honor of Colonel John Twiggs, who during the Revolutionary war won distinction in battles with the British, and subsequently with the Indians. It is bounded by the following counties: Bibb and Jones on the north and northwest. Wilkinson on the east, Pulaski on the south, Houston and Bibb on the west. The Ocmulgee river is on its western boundary. Into it empty Shellstone, Crooked, Flat and Savage creeks. The northern part of the county is generally broken, with gray soil. The lands on Ocmulgee river and Turkey creek are about the best, having a good clay soil.

Taking the general average of all the lands in the county, the yield to the acre under ordinary methods of culture is: corn, 9 bushels; wheat, from 8 to 10 bushels; oats, 12 bushels; rye, 5 bushels; peas, 8 bushels; ground-peas, 30 bushels; Irish and sweet potatoes, each about 100 bushels; seed cotton, 500 pounds. There are many acres of the best land which greatly exceed most of the above yields, giving as an average production to the acre: corn, 20 bushels; oats, 25; wheat, 12; rye, 7; field-peas, 10; ground-peas, 40; sweet potatoes, 125; seed cotton, 800 pounds; bermuda and crab-grass hay, 2,000 pounds each; corn fodder, 450 pounds; sugar-cane syrup, 300 gallons.

Vegetables of great variety and excellent quality are raised in great abundance. Fruits, melons and berries do well.

There is a growing interest in the improvement of the breeds of cattle. Jerseys and Holsteins are favorite cows for milk. Steps are being taken to raise more beef cattle and from better breeds. In 1890 Twiggs county had 2,766 cattle, 204 of which were working oxen, and 963 milch-cows, 464 horses, 1,163 mules, 8,960 swine and 42,034 domestic fowls. Among its products were 150,744 gallons of milk, 38,243 pounds of butter, 63,237 dozens of eggs and 4,986 pounds of honey. There were also 55 sheep, with a wool-clip of 152 pounds.

There are still standing about 40,000 acres of pine, hickory, oak and poplar. The annual output of lumber is about 250,000 superficial feet, valued at \$8.00 a thousand feet.

Bluestone of good quality is found. There are good veins of pottery clay, which is being worked by a small plant valued at about \$2,000.

The Ocmulgee river and its tributaries abound in fish. The game consists chiefly of quails and rabbits (or hares).

There are in Twiggs county 8 grist-mills and one sawmill. About half the grist-mills are operated by water, and the rest by steam.

The Southern Railway traverses the western part of the county, and the Macon, Dublin and Savannah the eastern section. Jeffersonville on the latter road is the county site. Other postoffices are Big Sandy, Bul-lards, Burns and Fitzpatrick.

The cotton receipts and shipments amount to 7,000 bales. Most of the products of the county are marketed in Macon. According to the

United States census of 1900, there were ginned in this county, 9,484 bales of upland cotton in the season of 1899-1900.

Twiggs county has about 36 public schools, 19 for whites and 17 for negroes. The average attendance is: whites 401, colored, 539.

Churches of the Methodist and Baptist denominations are in every section of the county.

The area of Twiggs county is 423 square miles, or 270,720 acres. Population of Twiggs county in 1900, 8,716; a gain of 521 since 1890; school fund, \$6,840.33.

By the Comptroller-General's report for 1900, there are: acres of improved land, 216,089; of wild land, 9,709; average value per acre of improved land, \$1.95; of wild land, \$0.60; city property, \$19,944; money, etc., \$24,666; merchandise, \$11,825; household furniture, \$30,556; farm and other animals, \$83,487; plantation and mechanical tools, \$17,766; watches, jewelry, etc., \$2,582; value of all other property, \$30,801; real estate, \$447,440; personal estate, \$219,288. Aggregate value of whole property, \$666,728.

Property returned by colored taxpayers: number of acres of land, 6,917; value, \$14,150; city property, \$525; household furniture, \$7,755; watches, etc., \$144; farm and other animals, \$22,316; plantation and mechanical tools, \$4,217; value of all other property, \$849.00. Aggregate value of whole property, \$56,238.

The tax returns for 1901 show an increase of \$77,704 in the value of all property since 1900.

Population of Twiggs county by sex and color, according to the census of 1900: white males, 1,435; white females, 1,476; total white, 2,911; colored males, 2,912; colored females, 2,893; total colored, 5,805.

Domestic animals in Twiggs county in barns and inclosures, not on farms or ranges, June 1, 1900: No report.

UNION COUNTY.

Union County was laid out from Cherokee and organized in 1832. At the time of its organization there was a great deal of discussion in Georgia over Union and States' rights. John Thomas, who had been chosen by the people a representative from the new county, being asked by the legislature to suggest a name for it replied, "Union! for none but Union men live in the county." The legislature was strongly of the same sentiment and accepted the name.

This county is bounded as follows: on the north by North Carolina, on the northeast and east by Towns county, on the southeast by White and Lumpkin, on the south by Lumpkin, and on the west by Fannin.

Notley creek and Teccoa river are the principal streams. From them are caught mountain trout and horny-heads. The pleasant summer climate, bracing atmosphere and cold, freestone water, render this a healthy and delightful section of the State.

The southern part of the county is traversed by the Blue Ridge with

many peaks, among the most noted of which are Ivy Log, Cooper's, Creek Blood, Track Rock, Ball and Round Top Mountain. Track Rock, which is seven miles east of Blairsville, is in a gap of the Enchanted Mountain. This rock is so called, because, at the headwaters of Brass Town creek, where it is a species of soapstone, it is marked by tracks of turkeys, deer, horses, bears, and by what are supposed to be the footprints of Indians.

On Notely river, or creek, as it is also called, about one and a half miles from Blairsville, there once occurred a battle between the Cherokee and Creek Indians over some disputed territory, and these images are said to be hieroglyphics made to commemorate the event.

The oak and hickory table-lands are good, and those of the creeks and river bottoms are excellent. The chief productions are corn, wheat, rye, oats, tobacco, potatoes, cabbage of the finest kind, turnips, peaches and apples.

The average yield to the acre of the various crops is: corn, 20 bushels; oats, from 15 to 30 bushels, according to location; wheat, from 6 to 12 bushels; rye from 5, on ordinary lands, to 15 bushels, and more on the best soils; Irish potatoes, 100 bushels; sweet potatoes, from 100 to 200 bushels; peas, 25 bushels; ground-peas, 50 bushels; hay from crab and herds-grass, 1,500 pounds, and from clover, between 2,000 and 3,000 pounds; corn fodder, 450 pounds; sorghum syrup, 100 gallons.

With proper attention this is a great country for grass. Red top and clover do well, and can be made to yield abundantly. Cattle and sheep run in the woods in summer and thrive on the pasturage afforded by the native grasses. In winter they are fed on corn fodder, hay, cotton seed meal, hulls and bran.

Beef cattle constitute the chief reliance of the people for money, and renewed interest is being shown in the improvement of breeds. In 1890 Union county had 720 horses, 606 mules, 9 donkeys, 8,623 swine, 5,796 cattle, 1,074 of which were working oxen, 1,830 were milch-cows, 8,984 sheep, with a wool-clip of 12,253 pounds, and 67,843 domestic fowls.

Some of the productions of the county were 420,397 gallons of milk, 91,880 pounds of butter, 20 pounds of cheese, 15,541 pounds of honey, and 68,512 dozens of eggs.

In the western part of the county are found iron ore, alum, sulphate of iron and granite quartz. There are large quarries of millstone of excellent quality on Ivy Log and Brass Town creeks, on which same streams and on Coosa creek gold has been found. There is in this same section of the county variegated marble.

Blairsville, the county site, was named for James Blair of Habersham, which county he represented in the legislature for many years. It has a new court-house just completed which cost \$14,000.

The forest timbers which cover about 100,000 acres, are oak of various kinds, hickory, poplar, white and spruce pine, gum, walnut, black locust, maple and laurel. A few sawmills are engaged in cutting out lumber, but the output is small.

The religious denominations are Baptist, Methodist and Presbyterian, and their churches are scattered throughout the county.

There are 45 schools belonging to the State public school system. Of these 44 are for white and 1 for colored. The average attendance is 1,128 white and 22 colored.

The products of the county are marketed for the most part in Gainesville and Atlanta.

The area of Union county is 325 square miles, or 208,000 acres. Population by census of 1900, 8,481, a gain of 732 since 1890; school fund, \$5,777.72.

By the Comptroller-General's report for 1900 there are: acres of improved land, 202,356; of wild land, 33,573; average value per acre of improved land, \$1.44; of wild land, \$0.26; city property, \$12,800; money, etc., \$65,999; merchandise, \$16,416; household furniture, \$27,043; farm and other animals, \$102,046; plantation and mechanical tools, \$14,571; watches, jewelry, etc., \$874; value of all other property, \$9,159; real estate, \$314,961; personal estate, \$238,943. Aggregate value of property, \$553,904.

Property returned by colored taxpayers: number of acres, 157; value, \$325; household furniture, \$196; farm and other animals, \$292.00; plantation tools, \$24.00; value of all other property, \$5.00. Aggregate value of whole property, \$842.00.

The tax returns for 1901 show a decrease of \$5,803 in the value of all property since 1900.

Population of Union county by sex and color, according to the census of 1900: white males, 4,130; white females, 4,223; total white, 8,353; colored males, 66; colored females, 62; total colored, 128.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: No report.

UPSON COUNTY.

Upson County was laid out from Crawford and Pike in 1824. A part was taken from it and added to Pike in 1825. It was named in honor of Stephen Upson, a prominent lawyer of Oglethorpe county. The following counties bound it: Pike on the north, Monroe and Crawford on the east, Taylor and Talbot on the south and southwest, and Meriwether on the west.

The Thomaston branch of the Central Railroad runs from the northeast southward to the center of the county. The Macon and Birmingham Railroad enters the county about the middle of the eastern boundary, and runs northwestward, crossing the Central at Thomaston. One of the main lines of the Southern system from Atlanta to Fort Valley runs across the northeastern section of the county, while another branch from McDonough to Columbus passes for a few miles through the northwest corner. Thus this county enjoys the very best railroad facilities.

The best lands are in the southeastern part of the county on the Flint river, and on Potato and Noble's creeks. The soil belongs to the meta-

morphic formation, having red, undulating lands, interspersed with gray gravel, both underlaid with an impervious red clay subsoil. There is abundance of freestone water.

While the average yield per acre of all classes of land is 12 bushels of corn, 8 of oats, 7 of wheat and 550 pounds of seed cotton, the better lands, with good culture, produce per acre: corn, 20 bushels; oats, 30; barley, 40; wheat, 12; rye, 10; Irish potatoes, 100; sweet potatoes, 150; field-peas, 10; ground-peas, 20; seed cotton, 700 pounds; crab-grass hay, 3,000 pounds; bermuda grass hay, 4,000 pounds; corn fodder, with stalks, 4,000 pounds; sorghum syrup, 150 gallons; sugar-cane syrup, 100 gallons.

In the gardens are raised all the varieties of vegetables, berries and melons. Over and above home consumption there is sold about \$4,000 worth of truck annually. There are 81,151 peach-trees, and 4,241 apple-trees. The fruit trees bear abundantly on the lighter soils, which are not so well suited to cotton, corn, wheat, etc.

The native grasses give such good feed for stock that dairying pays well. The total number of cattle in Upson county in 1890 was 4,220, of which 154 were working oxen, and 1,702 were milch-cows, many of them being of improved breeds. There was a production of 358,403 gallons of milk and 103,683 pounds of butter. The county had 487 horses, 1,525 mules, 2 donkeys, 8,045 swine, and 54,154 domestic fowls of all kinds. There were 139 sheep, with a wool-clip of 215 pounds. There was also a product of 17,482 pounds of honey and 80,292 dozens of eggs.

The timber products are small, but there is yet on hand a considerable amount of swamp timber and hardwoods, among the latter the most prominent being oak, hickory and elm. The total value of these products is about \$9,000.

The utilized water-powers are: on tributaries of the Flint river, 595 horse-powers running 23 mills; on Big Potato creek, 60 horse-powers operating 2 mills. This creek is estimated to have 2,550 horse-powers, unused as yet. Some of the mills are sawmills, the majority grist-mills.

The various manufactories of all other kinds number 18, and have an annual output worth \$146,813.

Thomaston, the county seat, is a place of 1,714 inhabitants, or, including the entire district, 3,098. It has good church buildings, belonging to the Methodists, Baptists and Presbyterians. It also has excellent schools. The Thomaston cotton-mill has 175 looms and 6,600 spindles and a capital of \$100,000. By the census of 1900 there were ginned in Upson county 9,765 bales of upland cotton in the season of 1899-1900.

Other postoffices are Waynmanville, Swifton and the Rock. At Waynmanville is a cotton factory having 76 looms, 3,408 spindles, and a capital of \$63,000.

The whole county is well supplied with churches, and has 47 public schools, 28 for white pupils, and 19 for colored. The average attendance is 990 in the schools for whites and 893 in those for colored.

The Flint river runs along the whole western boundary. On the east side of this river begins the Pine Mountain, the highest summits of which are 800 feet above the river. Among these are some fine springs, and upon the highest point is an Indian mound.

The area of Upson county is 310 square miles, or 198,400 acres. Population of Upson county by the census of 1900, 13,670, a gain of 1,482 since 1890; school fund, \$10,184.77.

By the Comptroller-General's report for 1900 there are: acres of improved lands, 173,538; of wild lands, 3,628; value of improved lands per acre, \$3.66; of wild lands, \$0.79; city property, \$236,841; shares in bank, \$31,000; money, etc., \$179,947; value of merchandise, \$84,726; stocks and bonds, \$11,000; cotton factories, \$73,229; household furniture, \$67,826; farm and other animals, \$107,708; plantation and mechanical tools, \$31,526; watches, jewelry, etc., \$4,270; value of all other property, \$28,548; real estate, \$876,860; personal estate, \$623,700. Aggregate value of whole, \$1,500,560.

Property returned by colored taxpayers: number of acres of land, 8,690; value of same, \$26,854; city property, \$9,746; money, \$55; merchandise, \$80; household furniture, \$5,635; watches, etc., \$131; farm and other animals, \$12,111; plantation and mechanical tools, \$2,903; value of all other property, \$349.00. Aggregate value of whole, \$57,894.

The tax returns for 1901 show a gain of \$230,189 in the value of all property over the returns of 1900.

Population of Upson county by sex and color, according to the census of 1900: white males, 3,146; white females, 3,043; total white, 6,189; colored males, 3,689; colored females, 3,792; total colored, 7,481.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 12 calves, 11 steers, 3 bulls, 83 dairy cows, 109 horses, 24 mules, 2 sheep, 109 swine, 1 goat.

WALKER COUNTY.

Walker County was laid out from Murray and organized in 1833. It was named in honor of Major Freeman Walker of Richmond county, for many years a member of the Georgia legislature and a representative in Congress. It is bounded on the north by the State of Tennessee, Catoosa and Whitefield counties, east by Catoosa and Whitefield counties, south by Chattooga county, west by Dade county and the State of Alabama.

The Chickamauga creek (or river, as it is often called), is the largest stream in the county. Other water courses are: Chattooga river, Peavine, Duck, Rocky and Snake creeks. The dark, chocolate lands along the rivers produce abundantly of corn, wheat, rye, oats, barley, clover and potatoes, while the dark and gray soils of the valleys and table-lands yield fine crops of cotton. McLemore's Cove, Peavine, Armuchee and Chickamauga Valleys, cannot be surpassed in fertility by any lands in the State. With proper cultivation the lands of Walker county will

yield to the acre: corn, wheat and rye, 20 bushels each; barley, 30 bushels; Irish potatoes, 200 bushels; sweet potatoes, 50 bushels; field-peas, 15 bushels; ground-peas, 25 bushels; seed cotton, 1,000 pounds; crab-grass hay, 4,000 pounds; clover, 6,000 pounds; corn fodder, 700 pounds; sorghum syrup, 250 gallons. Clover does splendidly in this county. So do all the grasses, which furnish good summer pasturage. The vacant lands and woods afford excellent range for cattle and sheep. There is improvement in the breeds of cattle, for either beef or the dairy. The Jersey and Durham are the preferred types. During four or five months the cattle must be fed in order to give the best results. Cotton seed meal and hulls are used extensively for feeding stock. The most extensive sheep ranges of Georgia are found in the extreme northern and southern sections of the State.

In 1890 Walker county had 5,116 sheep, with a wool-clip of 10,074 pounds; 8,511 cattle, of which 254 were working oxen, and 2,692 were milch-cows with a fair proportion of improved breeds; 1,658 horses, 1,549 mules, 12,549 swine, and 115,819 domestic fowls of all sorts. Among the productions were 912,098 gallons of milk, 249,919 pounds of butter, 325 pounds of cheese, 19,922 pounds of honey and 185,288 dozens of eggs. Among the garden vegetables are fine specimens of cabbages. Strawberries, raspberries, blackberries and whortleberries abound. Some 200 acres are devoted to the raising of melons for the markets. There are 1,500 acres of peach and 1,600 of apple-trees.

There are extensive mines of iron and bituminous coal, employing some 700 hands, and representing a capital of \$400,000. Granite, marble and limestone of superior quality abound. There is also a good supply of fine timber, mostly hardwoods. The timber lands are worth about \$1.50 an acre, the uplands, \$10.00, and the lowlands or bottom lands from \$20.00 to \$50.00 an acre.

On Chickamauga creek and Chattooga river are excellent water-powers, some of which are utilized in operating a number of flour and grist-mills. The largest of these, known as Lee and Gordon's mills, received frequent mention in the reports of the battle of Chickamauga, fought on the 19th and 20th of September, 1863.

About 20 sawmills in the county are employed in utilizing its timber products.

At LaFayette is a cotton factory, known as the Union Cotton Mills, with a capital of more than \$100,000, having 212 looms and near 7,000 spindles. Walker county has also a woolen mill, valued at \$6,000, a tannery valued at \$100,000 and another establishment known as the Chickamauga Manufacturing Company. In this county, according to the United States census of 1900, there were ginned 3,631 bales of upland cotton of the crop of 1899-1900.

LaFayette, the county site, named in honor of General LaFayette, is beautifully situated on the former Chattanooga, Rome and Southern, now a branch of the Central of Georgia Railway. It has a court-house, valued at \$10,000; a bank with a capital of \$20,000, several flourishing mercantile establishments, and fire and life insurance agencies. The

population of this town is 491, and of the entire district of LaFayette, 2,357.

In Walker county, as already mentioned was fought the great battle of Chickamauga. The United States government has made of this battle-field a great national park, in which the positions of the various commands of the opposing armies are marked by monuments and tablets with appropriate inscriptions. The positions of the opposing batteries are marked by cannons arranged as if in action. The Georgia monument is among the most imposing on this historic field. Besides the steam railroads, an electric car line connects Chickamauga park with Chattanooga, Tennessee.

Near LaFayette is Wilson's Cave, a curiosity worth visiting, with its flight of natural stairs and spacious apartments, in which an almost infinite number of stalactites, formed from the drippings of water, resemble in size and appearance various animals and also inanimate objects such as cones, pyramids, altars, tables, candle-stands, etc.

Crawfish Spring, fifteen feet deep and two hundred feet wide, will well repay the curiosity of the visitor.

Round Pond, whose waters never become stagnant, is a beautiful expanse of water of a sea-green color, forty eight feet deep and embracing four or five acres. It has no visible outlet. Like most of the other streams of the county, it contains excellent fish.

The greater part of the products of Walker county are marketed in Chattanooga, Tennessee.

Two railroads, the Chattanooga Southern, and the Chattanooga, Rome and Southern, a branch of the Central, traverse the county from north to south. There are 85 miles of railroad and 60 miles of macadamized road. Methodists, Baptists, Presbyterians and some other denominations have churches scattered all over the county. There are 64 schools for white pupils, with an average attendance of 2,096, and 9 for colored, with an average attendance of 593.

The area of Walker county is 433 square miles, or 277,120 acres. Population by the census of 1900, 15,661, a gain of 2,379 since 1890; school fund, \$9,680.12.

By the Comptroller-General's report for 1900, there are: acres of improved land, 243,764; of wild land, 32,442; average value per acre of improved land, \$4.94; of wild land, \$0.93; city property, \$77,981; shares in bank, \$20,000; money, etc., \$259,710; merchandise, \$69,012; cotton manufactories, \$167,800; household furniture, \$118,688; farm and other animals, \$173,763; plantation and mechanical tools, \$50,670; watches, jewelry, etc., \$6,800; value of all other property, \$31,235; real estate, \$1,313,621; personal estate, \$1,306,196. Aggregate value of whole property, \$2,319,937.

Property returned by colored taxpayers: number of acres of land, 2,936; value of same, \$8,150; city property, \$1,695; money, \$183; household furniture, \$2,620; watches, etc., \$61; farm and other animals, \$7,704; plantation and mechanical tools, \$1,154; value of all other property, \$289.00. Aggregate value of whole, \$21,856.

The tax returns for 1901 show an increase of \$91,557 in value of all property since 1900.

Population of Walker county by sex and color, according to the census of 1900: white males, 6,838; white females, 6,359; total white, 13,197; colored males, 1,445; colored females, 1,019; total colored, 2,464.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 90 calves, 154 steers, 1 bull, 205 dairy cows, 136 horses, 29 mules, 2 donkeys, 51 sheep, 526 swine, 137 goats.

WALTON COUNTY.

Walton County was laid out by the lottery act of 1818, a part being taken from Jackson in that year. A portion of the county was added to Jasper in 1820. A part was given to Newton county in 1821, and during the same year a part was added to, and taken from Henry county. It was named in honor of George Walton, one of the signers of the Declaration of Independence, and afterwards Governor of Georgia.

Walton county is bounded as follows: Jackson and Oconee counties on the northeast, Morgan county on the southeast, Newton and Rockdale counties on the southwest, and Gwinnett county on the northwest.

The principal streams are the Appalachee, Alcovey and Yellow rivers. The creeks are Hard Labor, Jack's and Flat. Along these streams the lands are productive.

The face of the country is undulating. The larger part of the soil is gray. There is also considerable red and some black soil, which last two give the largest yields. The productions are cotton, corn, wheat, rye, oats, potatoes, vegetables, fruits and forage crops, which latter include crab-grass hay, fodder and peavines. It is the habit of the farmers to plant peas and cut hay and peavines on wheat fields after the wheat is harvested. Corn land is extensively planted in peas. The average yield to the acre, taking all lands together, is: corn, 12 bushels; wheat, 10 bushels; rye, 6 bushels; field-peas, 10 bushels; ground-peas, 100 bushels; sweet potatoes, 75 bushels; Irish potatoes, 80 bushels; seed cotton, 500 pounds; sorghum syrup, 75 gallons.

But taking the best lands and those most carefully cultivated, there is a great advance on some of these figures in the average yields to the acre, viz.: corn and oats, 20 bushels; rye, 15 bushels; Irish potatoes, 208 bushels; sweet potatoes, 200 bushels; sorghum syrup, 100 gallons, sugar-cane syrup, 150 gallons; bermuda or crab-grass hay, 4,000 pounds; corn fodder, 450 pounds; shredded corn, 4,000 pounds; seed cotton, 900 pounds. Vegetables, apples, peaches, melons and strawberries do well, as do also plums, cherries and blackberries. Some of these are sold in the markets of the county towns. The game and fish are hardly sufficient to supply the home demand.

Grass for summer pasturage is abundant. For winter cattle food cotton seed meal and hulls, and hay from grass, peavines and sorghum forage are used.

In 1890 Walton county had 830 sheep, with a wool-clip of 1,221 pounds, 6,202 cattle, of which 414 were working oxen and 2,568 milch-cows, of which many were improved breeds, 1,269 horses, 2,157 mules, 3 donkeys, 12,858 swine and 95,708 domestic fowls. There are four dairy farms, all doing well. The Jersey is the preferred dairy breed.

Among the farm products were 789,559 gallons of milk, 276,703 pounds of butter, 12,542 pounds of honey and 90,767 dozens of eggs.

More attention than formerly is being paid to the raising of beef cattle.

The Bethlehem Cider Company manufactures about 15,000 or 20,000 gallons of grape cider every season, making from \$5,000 to \$10,000 clear on the investment.

Of original forests there remain about 5,000 acres; of second growth pines, about 25,000 acres. About five sawmills work this timber and prepare it for the market. It sells at an average of \$8.00 a thousand feet.

There are two cotton-mills in the county, one at High Shoals, opposite the town of that name in Oconee county, having 150 looms and 5,000 spindles; the other at Monroe, with 534 looms and 5,200 spindles. Each has a capital of over \$100,000. Two other cotton factories are being built in the county. There are 20 flour and grist-mills, of which one half are operated by water. There are two cotton seed oil-mills, one at Monroe, the other at Social Circle. In the Social Circle district are 2,879 people, of whom 1,229 are in the town of Social Circle.

The county has three banks: one at Felker with a capital of \$50,000; the Bank of Social Circle, with a capital of \$55,125; the Bank of Monroe, with a capital of \$81,500.

Monroe, the county site, has a population of 1,846 in its corporate limits, or 3,241 including Monroe district. It is on an elevated location with a fine view of Stone Mountain in the distance, and has public buildings valued at \$40,000. These include court-house, jail and halls.

In the towns already named are successful mercantile establishments, fire and life insurance agencies and some small manufactories. This county is credited by the United States census of 1900 with having ginned 19,665 bales of upland cotton in the season of 1899-1900.

Religious and educational advantages are excellent. There are 61 church edifices in the county belonging to Baptists, Methodists and Presbyterians.

There are 66 public schools, 42 for white and 24 for negroes, with an average attendance of 1,973 white and 1,047 colored.

The public roads are for the most part good.

The Gainesville, Jefferson and Southern Railroad runs from north to south through the county. On it are the towns of Monroe and Social Circle. Through this latter town also passes the Georgia Railroad. Just across the northern border of the county runs the Seaboard Air Line, a branch of which also connects Loganville with Lawrenceville in Gwinnett county.

There is good granite near Loganville, but it is not being quarried.

The area of Walton county is 366 square miles, or 234,240 Population in 1900, 20,942, a gain of 3,475 since 1890; school \$13,773.30.

By the Comptroller-General's report for 1900, there are: acres of proved land, 229,548; average value per acre, \$5.02; shares in \$175,500; gas and electric light companies, \$1,000; city property, \$560; money, \$291,707; merchandise, \$124,821; stocks and bonds, \$3,000; cotton manufactories, \$251,000; household furniture, \$668; farm and other animals, \$173,763; plantation and mechanical tools, \$50,670; watches, jewelry, etc., \$4,651; value of all other property, \$79,291; real estate, \$1,466,716; personal estate, \$1,306. Aggregate value of whole, \$2,772,912.

Property returned by colored taxpayers: number of acres of land, 5,143; value of same, \$22,780; city property, \$7,860; money, etc., \$9,934; household furniture, \$9,934; farm and other animals, \$15,039; watches, etc., \$75; plantation and mechanical tools, \$3,292; value of all other property, \$731.00. aggregate value of whole property, \$60,075.

The tax returns for 1901 show an increase of \$91,557 in the value of all property since 1900.

Population of Walton county by sex and color, according to the census of 1900: white males, 6,261; white females, 6,340; total white, 12,601; colored males, 4,149; colored females, 4,192; total colored, 8,341.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 53 calves, 5 bulls, 99 dairy cows, 136 horses, 16 mules, 246 sheep, 246 swine, 4 goats.

Jack's creek in Walton county is noted for a battle with the Indians fought by General Elijah Clarke at the head of 130 men on the 21st September, 1787.

The Indians had committed several murders in numerous predatory raids. General Clarke, distinguished as Georgia's great partisan leader in the war for independence, gathered a party of volunteers and in the fight at Jack's creek gave the savages a salutary lesson, which greatly promoted the future security of the county.

WARE COUNTY.

Ware County was laid out from Irwin in 1824, and was named in honor of Hon. Nicholas Ware of Richmond county, who had served in the Georgia Legislature, was elected United States Senator in 1821, and died in New York in 1824. It is bounded by the following counties: Appling on the north, Pierce on the east, Charlton on the south and also on the east for some distance; Florida on the south; Clinch on the southwest and Coffee on the west. It is a well-watered county. Several miles north of the center Satilla river crosses it from west to east and into it flow from north to south several creeks. Long and Deep creeks traverse its central section from northwest to southeast, where they mingle their



waters with Okefinokee Swamp, which covers the greater part of the extreme southern section. The lands are level and interspersed with many swamps. The soil is light but productive in sugar-cane, cotton, corn, potatoes, tobacco, peaches, melons, figs and oranges. All the fruits here mentioned grow well.

It is a splendid county for stock-raising. Cattle and sheep have a fine range over the uncultivated lands, where the grass affords excellent grazing the year round. The mild winters make shelter unnecessary. With the exception of sheep-shearing and milking the cows almost no attention beyond marking and branding is required.

The pine and cypress timber is very valuable, and rosin, turpentine and lumber are obtained in large quantities. The annual output of lumber is 50,000,000 superficial feet at an average price of \$10.00 a thousand feet. Seven steam sawmills are kept busy getting it ready for market. There are ten turpentine distilleries. A sash, door and blind factory, worth \$20,000 and two manufactories of iron, worth \$10,000, are among the industries. The shops of the Plant System are valued at \$100,000 and employ a great many hands.

Three dairy farms are evidence of the advance being made by the county in the line of improved milk breeds, and much interest is being manifested now in the rearing of beef cattle. The United States census for 1900 reports 344 dairy cows kept in barns and inclosures.

With careful cultivation the lands will produce to the acre: corn, 15 bushels; oats, 20; rice, 10; Irish potatoes, 100; sweet potatoes, 200; field-peas, 15; ground-peas, 30; sea-island cotton, 800 pounds; crab-grass hay, 2,000 pounds; corn fodder, 200 pounds; sugar-cane syrup from 300 to 400 gallons.

In 1890 Ware county had 3,098 sheep, with a wool-clip of 4,859 pounds; 7,721 cattle, 137 being working oxen, and 2,056 cows, 364 horses, 131 mules, 1 donkey, 7,482 swine and 16,176 fowls.

Among the products were 142,905 gallons of milk, 710 pounds of butter, 7,297 pounds of honey and 31,232 dozens of eggs. According to the United States census of 1900 there were ginned for the season of 1899-1900, only 123 bales of sea-island cotton.

Game and fish are plentiful. Deer and wild turkeys afford fine sport to the huntsman.

Three branches of the Plant System and the Waycross Air Line give ample railroad facilities. All these center at Waycross, the county site, a rapidly growing town with electric plant, for lighting and street railway, valued at \$15,000, gas and water-works worth \$30,000, a courthouse which cost \$30,000, seven white and nine colored churches, and a good public school system. It has three banks with an aggregate capital of \$175,000. Waycross had in 1880 a population of 628; in 1890 a population of 3,364, and, by the census of 1900, a population of 5,919. The district which includes Waycross contains 7,771 inhabitants.

Waresboro, the former county site, is the next town of importance, but has only 269 inhabitants. The whole Waresboro district contains 1,239 people.

The county is well supplied with schools and with churches of the Methodists, Baptists and Presbyterians. There are 32 schools for whites and 8 for colored, belonging to the public school system. The average attendance is 933 white and 600 colored pupils.

There are several small pecan groves in Ware county, and some very fine trees are at Waycross. The nuts are mostly of the paper shell variety. Many of them have been shipped to Jacksonville, Florida, where there is a good demand for them.

The land area of Ware county is 676 square miles, or 432,640 acres. Population in 1900, 13,761, a gain of 4,950 since 1890; school fund, \$5,008.08; school fund for Waycross, \$2,668.80.

According to the Comptroller-General's report for 1900 there are: acres of improved lands, 182,937; wild lands, 588,966; average value of improved lands per acre, \$1.86; of wild lands, \$0.18; city property, \$942,494; shares in bank, \$89,000; gas and electric light companies, \$3,000; money, etc., \$36,131; merchandise, \$244,813; cotton manufactories, \$2,720; iron works, \$400; household furniture, \$180,108; farm and other animals, \$190,211; plantation and mechanical tools, \$30,898; watches, jewelry, etc., \$13,880; value of all other property, \$113,448; real estate, \$1,379,332; personal estate, \$1,625,996. Aggregate value of whole property, \$2,605,328.

Property returned by colored taxpayers: number of acres of land, 5,802; value of same, \$14,110; city property, \$53,269; money, etc., \$90; household furniture, \$13,036; watches, \$635; farm and other animals, \$8,510; plantation and mechanical tools, \$2,805; value of all other property, \$767.00. Aggregate value of whole property, \$98,222.

The tax returns for 1901 show a gain of \$278,841 in the value of all property over the returns of 1900.

Population of Ware county by sex and color, according to the census of 1900: white males, 4,485; white females, 4,167; total white, 8,652; colored males, 2,715; colored females, 2,394; total colored, 5,109.

Population of Waycross by sex and color, according to the census of 1900: white males, 1,539; white females, 1,481; total white, 3,020; colored males, 1,448; colored females, 1,451; total colored, 2,899.

Total population of Waycross, 5,919.

Domestic animals in Ware county in barns and inclosures, not on farms or ranges, June 1, 1900: 214 calves, 121 steers, 18 bulls, 344 dairy cows, 190 horses, 167 mules, 12 sheep, 752 swine, 86 goats.

WARREN COUNTY.

Warren County was laid out in 1793 and named in honor of Major General Joseph Warren of Massachusetts, who fell at the battle of Bunker or Breed's Hill, near Boston, on the 17th of June, 1775. Portions of this county were set off to Jefferson in 1796, and to Taliaferro in 1825. It has the following counties on its borders: Wilkes and Taliaferro on the north, McDuffie on the east (or slightly northeast), Glas-

cock and Jefferson on the south, Hancock and Taliaferro on the west, and Taliaferro on the northwest.

The North Fork of the Ogeechee is on the western boundary. Brier creek rises on the southeastern border, runs southeast for 100 miles through other counties, and empties into the Savannah river. Long and Rocky creeks flow from the center of the county southward into the Ogeechee river, which abounds in fish.

The best lands of the county are those where oak and hickory are the prevailing growth. These are well adapted to corn and cotton. Other lands containing some oak and hickory, but with pine predominating, are suited to the small grains, vegetables, potatoes, melons and fruits. Some hay is made from crab and bermuda grasses, which also give good pasturage for stock.

The average production of all the lands to the acre is: Corn, 10 bushels; oats, 12; wheat, 9 bushels; Irish potatoes, 100; sweet potatoes, 75; field-peas, 8; ground-peas, 50; seed cotton, 600 pounds; corn fodder, 200 pounds; crab-grass hay, 2,000 pounds; sorghum syrup, 200 gallons; sugar-cane syrup, 100 gallons. Some of the best lands make 20 bushels of corn and oats to the acre, wheat, 12 bushels, and 10 to 12 bushels of peas. Peavines are used extensively for hay.

In 1890 Warren county had 770 sheep, with a wool-clip of 1,562 pounds; 4,022 cattle, 333 being working oxen; and 1,425 milch-cows; 975 horses, 1,041 mules, 5 donkeys, 51,486 domestic fowls, and 9,615 hogs. In 1890 there were 101 dairy cows kept in barns or inclosures. Among the farm products, according to the census of 1890, were 333,315 gallons of milk, 98, 786 pounds of butter, 9,589 pounds of honey, and 55,909 dozens of eggs.

Vegetables, fruits and melons are raised on farms and in gardens in the towns and villages. The products of the county are marketed at Warrenton, Camack and Barnett.

The Georgia railroad from Augusta to Atlanta, entering the county on the east, crosses it, turning a little to the northwest. Another branch of this road turns off at Camak, and going through Warrenton, turning to the southwest, traverses the central section on its course to Macon. Another road runs from Barnett to Washington, in Wilkes county. Thus Warren county enjoys excellent railroad facilities.

Every section of the county has good educational and religious advantages. The prevailing sects are Methodists, Baptists and Presbyterians. Warrenton, the county site, is a pretty town, with a cultured and moral population of 1,115 inhabitants, while the district in which it is included, has a population of 2,842. A company has been organized to build a cotton factory at Warrenton. Other towns are Camak, Barnett, Norwood and Mesena.

Warren county is credited by the United States census of 1900 as having ginned 9,659 bales of upland cotton in the season of 1899-1900. Gold has been found in the upper part of the county.

There are in the county 27 schools for white and 24 for colored pupils, with an average attendance of 632 white pupils and 815

colored. The area of Warren county is 298 square miles, or 190,720 acres. Population in 1900, 11,463, a gain of 506 since 1890. School fund, \$8,108.32. According to the report of the Comptroller-General for 1900 there are 176,246 acres of improved land; average value per acre, \$3.80; city property, \$147,974; shares in bank, \$27,700; money, etc., \$132,206; merchandise, \$53,510; stocks and bonds, \$125; cotton manufactories, \$32,725; household furniture, \$75,863; farm and other animals, \$128,514; plantation and mechanical tools, \$27,829; watches, jewelry, etc., \$4,651; value of all other property, \$27,456; real estate, \$818,469; personal estate, \$527,835; aggregate value of whole property, \$1,346,304

Property returned by colored tax payers: number of acres of land, 2,254; value of same, \$8,065; city property, \$14,260; money, etc., \$200; merchandise, \$2,015; household furniture, \$13,948; watches, etc., \$231; farm and other animals, \$18,927; plantation and mechanical tools, \$4,881; value of all other property, \$960.00; aggregate value of whole property, \$63,487.

The tax returns for 1901 show a decrease of \$25,612 in the value of all property since 1900.

Population of Warren county by sex and color, according to the census of 1900: white males, 1,918; white females, 1,924; total white, 3,842; colored males, 3,613; colored females, 4,008; total colored, 7,621.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900, 70 calves, 100 steers, 2 bulls, 92 dairy cows, 104 horses, 2 mules, 308 swine, 3 goats.

WASHINGTON COUNTY.

Washington County was established in 1784, and named in honor of George Washington. It at that time included all the territory "from the Cherokee corner north, extending from the Ogeechee to the Oconee south to Liberty county." In 1786 a portion of it was added to Greene county; in 1793, a part to Hancock; in 1807, a part to Baldwin; and in 1826 another part to Baldwin. It is bounded by the following counties: Glascock and Jefferson on the northeast, Jefferson on the east, Johnson on the South, Wilkinson on the southwest, Wilkinson and Baldwin on the west, and Hancock on the northwest.

The Ogeechee river is on its northeastern boundary, the Oconee on its western and southwestern border, the Ochoopee river and its tributary, Dyer creek in the south central portion. Swamp creek, rising in the north, flows in a southeasterly direction, finally emptying into the Ogeechee river at the southeastern edge of Jefferson county. Buffalo and Keg creeks, entering the county on the northwest, unite their waters near the west-central section and turning southwest, enter the Oconee on the southwest border. Town creek forms part of the western boundary between Washington and Baldwin counties. This is, therefore, a well-watered county. The water is mainly freestone.

The face of the county is for the most part level, but in some places

gently rolling. The soil is of the tertiary formation, having gray, sandy lands with red outcroppings in places. It is also mixed with lime in some parts of the county.

The productions are the same as in most of the counties of the middle Georgia belt. The native grasses furnish excellent grazing. Crab-grass, sorghum and peavines constitute the principal hay crop. Taking all the lands of the county together, the average production to the acre is: corn, 10 bushels; oats, 12 bushels; wheat, 6 bushels; Irish potatoes, 50 bushels; sweet potatoes, 120 bushels; field-peas, 10 bushels; ground-peas, 15 bushels; seed-cotton, 600 pounds; crab-grass hay, 2,000 pounds; sugar-cane syrup, 150 gallons. But the better class of lands, with skillful cultivation, will produce to the acre: corn, 20 bushels; oats, 35; rye, 10; wheat 12; Irish potatoes, 100; sweet potatoes, 200; field-peas, 20 bushels; ground-peas, 25 to 30 bushels; seed-cotton, 800 pounds, and with intensive farming on the best lands, 3,000 pounds; crab-grass hay, 4,000 pounds; sugar-cane syrup, 350 gallons.

By the census of 1890 Washington county had 2,920 sheep, with a wool-clip of 6,603 pounds; 8,531 cattle, 571 being working oxen, and 2,892 milch-cows, 1,527 horses, 2,418 mules, 1 donkey, 26,563 hogs, and 117,307 domestic fowls. There are 188 dairy cows kept in barns or inclosures. Among the farm products are 502,920 gallons of milk, 101,092 pounds of butter, 50 pounds of cheese, 28,645 pounds of honey, and 172,583 dozens of eggs.

Washington exports about 800 head of cattle annually.

The timber products are valued at about \$18,000 annually, and are obtained from the yellow pine and hard-woods, the latter including white oak and other swamp timber on streams. On the tributaries of the Ogeechee river about 33 horse-powers are utilized, and 58 horse-powers on the tributaries of the Oconee.

The value of truck sold in the county amounts to \$12,000 annually.

The output of the manufactories of Washington county is valued at \$252,969.

Potter's clay, sandstone, and buhrstone abound. Opal, hornstone, jasper, chalcedony and agate have been found. Near Sandersville are sinks or caves in which are gathered fossil teeth, and a great variety of ribs and shells. Rare mussels are found in the streams. Brick and jug ware are among the clay products.

At Sandersville are Lang's machine works, and Jordan's flour-mill; at Tennille, a cotton factory with 4,000 spindles and a capital of \$60,000, a cotton oil-mill, and Smith's mineral works; at Chalker, Robert's brick works; at Warthen, Warthen's flour-mill; at Thena, Walker's flour-mill. The flour and grist-mills of the county number 10, of which four use water power. There are two banks at Sandersville, and two at Tennille. At these places are several prosperous mercantile establishments, and life and fire insurance agencies.

At Tennille there are also a hard-wood factory, a novelty factory, machine works and an electric light plant. By the census of 1900 the cotton ginned in Washington county in 1899-1900 was 29,544 bales (upland).

Sandersville, the county site has a court-house valued at \$40,000, and a jail worth \$20,000. This town is situated on a ridge between the Oconee and Ogeechee rivers, 480 feet above tide water. It has a population of 2,023, according to the census of 1900, while its whole district contains 3,013 people. It is on a branch of the Southern railway, three miles north of Tennille, where the Southern meets the Central of Georgia railway, and which is the terminus of the Wrightsville and Tennille railroad. Tennille, with a population of 1,121, is the second most important town of the county. The whole Tennille district contains 3,195 people.

Methodists and Baptists are the prevailing denominations. There are 47 public schools for white pupils in the county, and 37 for colored, with an average attendance of 1,576 whites and 1,421 colored.

The area of Washington county is 680 square miles, or 435,200 acres.

The population in 1900 was 28,227, a gain of 2,900 since 1890. The school fund is \$18,850.76.

By the Comptroller-General's report for 1900 there are: acres of improved lands, 407,375; of wild lands, 1,450; average value per acre of improved lands, \$4.29; city property, \$495,362; shares in bank, \$20,500; money, etc., \$399,324; merchandise, \$181,044; stocks and bonds, \$27,905; cotton manufactories, \$500; mining, \$100; iron works, \$5,900; household furniture, \$178,159; farm and other animals, \$295,213; plantation and mechanical tools, \$68,513; watches, jewelry, etc., \$12,763; value of all other property, \$105,962; real estate, \$2,241,217; personal estate, \$1,370,893; aggregate value of whole property, \$3,481,014.

Property returned by colored taxpayers: number of acres of land, 10,462; value of same, \$42,928; city property, \$13,901; money, etc., \$770; merchandise, \$25; household furniture, \$25,565; watches, etc., \$455; farm and other animals, \$43,686; plantation and mechanical tools, \$11,243; value of all other property, \$34,624; aggregate value of whole property, \$207,899.

The tax returns for 1901 show an increase of \$125,419 in the value of all property over the returns of 1900.

Population of Washington county by sex and color, according to the census of 1900: white males, 5,485; white females, 5,320; total white, 10,805; colored males, 8,526; colored females, 8,896; total colored, 17,422.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 82 calves, 38 steers, 2 bulls, 174 dairy cows, 167 horses, 56 mules, 1 donkey, 22 sheep, 548 swine, 9 goats.

WAYNE COUNTY.

Wayne County, which was laid out by the lottery act of 1803, was organized in 1805, and named in honor of Major-General Anthony Wayne, one of the most distinguished among the heroes of the American revolution. Part was taken from it in 1805 and given to Camden. Parts were added to it from Camden in 1808 and 1812. A part was added to it from Glynn in 1820, and a part was added to Glynn in 1822.

Wayne county is bounded on the northeast by Tattnall, Liberty and McIntosh counties; on the east by Glynn county, which is also south of a small portion of it, on the south by Camden, Charlton and Pierce, and on the west by Pierce and Appling. Along the whole northeastern border runs the Altamaha river. The Satilla river, after forming part of its western border, turns to the southeast, and passing through the lower section of the county, enters Camden at about the center of the southern boundary. Each of these rivers abounds in fish. The central portions of the county are watered by tributaries of the Altamaha and Satilla, the most important of which is the Finoholloway, or Phennohalloway river (an Indian name meaning turkey), which flows northeastward into the Altamaha.

The soil, when fertilized, is productive of sugar-cane, potatoes, rice, corn, a variety of vegetables, melons and long-staple cotton. A great part of the county is wild land, which, being covered with grass, affords a splendid range for cattle, sheep and hogs. The mild winter saves the expense of housing, and but little outlay is required to carry them through the cold season. In the spring they are marked and branded, and in the fall are in good condition for the market, which is in the main a home one.

By the census of 1890 Wayne county had 3,642 sheep, with a wool-clip of 8,762 pounds; 10,667 cattle, 396 being working oxen, and 2,794 milch-cows; 690 horses, 104 mules, 1 donkey, 12,858 hogs and 24,102 domestic fowls.

Among the farm products were 108,632 gallons of milk, 36,035 dozens of eggs, 4,754 pounds of honey, and 2,638 pounds of butter.

The land, with proper fertilization and culture, will produce to the acre: corn, 15 bushels; oats, 20 bushels; Irish potatoes, 75; sweet-potatoes, 200; field peas, 16; ground-peas, 30; sea-island cotton, 500 pounds; crab-grass hay, 2,000 pounds; corn fodder, 250 pounds; sugar-cane syrup, 200 gallons.

The county is traversed by the Southern railway, and the Savannah, Florida and Western, of the Plant System. The Florida, Central and Peninsular, of the Seaboard Air Line system, touches a corner of the county on the east. The Altamaha and Satilla rivers also furnish water transportation.

Jesup, the county site, is a growing town at the point where the Plant and Southern railway lines cross each other.

The timbers are pine and cypress. There is a large trade in rosin, turpentine and lumber. There are many sawmills and turpentine distilleries.

On lands that have been cleared, enterprising men have found profit in raising sugar-cane, vegetables, peaches and grapes. A few years ago Mr. Alexander Hurn, an Englishman, came to Georgia, and at Gardi, on the line of the Southern railway, planted a vineyard, and also engaged in peach culture with gratifying results. His vineyard is one of the most attractive sights on the line of the Southern railway in Wayne county.

In response to a request from Colonel Wade, of the Southern, Mr.

Hurn planted one acre in cassava, and he reports great success. The result of many other recent experiments go to show that this new crop is destined to be a great source of profit to the farmers of Southern Georgia.

Wayne county is reported in the United States census of 1900 to have ginned 110 bales of upland cotton and 855 of sea-island cotton in the season of 1899-1900.

The Jesup district, including the town, contains 1,713 inhabitants, and in the town proper are 805 people.

The area of Wayne county is 766 square miles, or 490,240 acres.

The population in 1900 was 9,449, a gain of 1,964 since 1890.

We are indebted to the report of the Comptroller-General for 1900 for the following items: Acres of improved land, 270,147; of wild land, 267,531; average value per acre of improved land, \$1.39; of wild land, \$0.57; city property, \$144,593; shares in bank, \$5,000; money, etc., \$178,633; merchandise, \$61,216; cotton manufactories, \$20,000; household furniture, \$69,068; farm and other animals, \$198,504; plantation and mechanical tools, \$22,863; watches, jewelry, etc., \$6,239; value of all other property, \$64,878; real estate, \$675,419; personal estate, \$622,733; aggregate value of whole property, \$1,298,152.

Property returned by colored taxpayers: Acres of land, 11,179; value of same, \$13,465; city property, \$12,320; money, etc., \$120; merchandise, \$225; household furniture, \$4,501; watches, etc., \$241; farm and other animals, \$6,954; plantation and mechanical tools, \$820.00; value of all other property, \$1,896; aggregate value of whole property, \$41,105.

The tax returns for 1901 show a gain of \$213,036 in the value of all property over the returns of 1900.

The public school system has 59 schools for white, and 13 for colored, with an average attendance of 1,258 white pupils, and 318 colored.

Population of Wayne county by sex and color, according to the census of 1900: white males, 3,670; white females, 3,552; total white, 7,222; colored males, 1,176; colored females, 1,051; total colored, 2,227.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 30 calves, 31 steers, 5 bulls, 65 dairy cows, 26 horses, 14 mules, 240 swine.

WEBSTER COUNTY.

Webster County was laid out in 1854, and named in honor of Daniel Webster, a native of New Hampshire, and for many years a United States Senator from Massachusetts. This county is bounded, north by Marion and Chattahoochee, east by Marion and Sumter, south by Terrell and Randolph, and west by Stewart.

The principal streams in Webster county are Kinchafoonee, Choctawhatchee, Tanahapee, Ichawaynochaway, Bear and Slaughter creeks.

Webster county is traversed by two branches of the Seaboard Air Line system of railways, one of which passes from east to west through the center, the other passing from southeast to northwest through the

southwestern section of the county. On the former of these is Preston, the county site.

The surface of the county is generally level, having a gray, sandy top-soil, with red clay subsoil. Under the ordinary methods of cultivation the average yield of the various crops to the acre is: corn, 8 bushels; wheat, 7 bushels; oats, 14 bushels; rye, 5 bushels; Irish potatoes, 100 bushels; sweet potatoes, 150 bushels; field-peas, 5 bushels; ground-peas and chufas, 25 bushels, each; crab-grass or crow-foot hay, 3,000 pounds; seed-cotton, 400 pounds. But under improved methods the yields to the acre are greatly increased in several of these crops, as for instance: corn, 15 bushels; oats, 20 bushels; wheat, 12 bushels; field-peas, 10 bushels; ground-peas, 30 bushels; hay from crow-foot or crab-grass, 6,000 pounds. The sugar-cane syrup averages 200 gallons to the acre.

The native grasses already mentioned are the chief reliance for hay and pasturage. These, with smut and swamp-grass, give good grazing for eight months of the year. For four months, at least, cattle should be carefully tended and fed on bran, cotton-seed meal and hulls, with a fair mixture of hay.

While there are no dairy farms in the county, several Jerseys are found on farms. Of pure breeds and those of half grade or higher there are about 200. Very little attention has so far been paid to the improvement of beef cattle.

In 1890 Webster county had 239 sheep, with a wool-clip of 471 pounds; 2,492 cattle, 143 being working oxen, and 838 milch-cows; 398 horses, 794 mules, 1 donkey, 7,972 hogs, 28,480 domestic fowls. Some of the farm products were 139,035 gallons of milk, 36,444 pounds of butter, 58,569 dozens of eggs, and 12,879 pounds of honey.

Fish are plentiful in the streams. There are also a few private ponds.

Vegetables, melons and fruits are produced in sufficient quantities for home consumption and for sale in the towns of the county.

About 300 acres are devoted to peach-trees, 150 to apples, 100 each to pears and plums, and 10 to cherries. About 71 acres are devoted to grapes, of which choice varieties are raised in large quantities.

The forest growth consists of pine, poplar, ash, birch, tupelo, sweet and black gum, hickory, black-jack, red, white and Spanish oaks. The standing timber is worth \$7.00 per acre for soft-wood, and \$8.00 to \$10.00 per acre for hard-wood. The annual output of lumber in superficial feet is 800,000, averaging \$7.50 per 1,000 feet at the mill. There are two sawmills operated by steam, worth in the aggregate \$3,800.

The streams already mentioned afford considerable water-power, some of which is utilized in the running of five flour and grist-mills, worth \$6,500 in all.

The mineral products are inconsiderable, consisting of iron, clay, limestone, manganese and mica in small quantities, none of which is mined or quarried.

The products of the county are marketed at Preston and Weston, the former of which is the county site. The receipts and shipments of cotton for the entire county are 5,260 bales. The cotton ginned for the

season of 1899-1900 is stated by the United States census report for 1900 to be 4,116 bales (upland).

The leading denominations in the county are Baptists, Methodists and Presbyterians, the two former being the more numerous.

There are in the county 14 schools for whites, and 17 for colored. The average daily attendance of the former is 390; of the latter, 448.

The area of Webster county is 227 square miles or 145,280 acres.

Population in 1900, 6,618, a gain of 923 since 1890; school fund \$4,695.88. According to the report of the Comptroller-General for 1900 there are: acres of improved land, 125,844; value of improved land per acre, about \$3.16; city and town property, \$19,504; money and solvent debts, \$54,552; merchandise, \$16,640; stocks and bonds, \$1,242; household furniture, \$39,075; value of farm and other animals, \$85,670; plantation and mechanical tools, \$20,328; watches, jewelry, etc., \$1,772; value of all other property, \$20,578; real estate, \$415,250; personal estate, \$242,709; aggregate value of whole, \$657,959.

Property returned by colored taxpayers: acres of land, 5,048; value of land, \$14,068; city or town property, \$595; household and kitchen furniture, \$8,648; watches, jewelry, etc., \$130; farm and other animals, \$13,156; plantation and mechanical tools, \$2,704; value of all other property, \$805.00; aggregate value of whole property \$40,116.

The tax returns for 1901 show an increase of \$66,478 in the value of all property since 1900.

Population of Webster county by sex and color, according to census of 1900: white males, 1,244; white females, 1,260; total white, 2,504; colored males, 2,086; colored females, 2,028; total colored, 4,114.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: no report.

WHITE COUNTY.

White County was formed from Lumpkin and Habersham in 1857, and was named in honor of Colonel John White, of Chatham county, who, as an officer of the Georgia line distinguished himself during the siege of Savannah by the Americans and French in October, 1779, by a stratagem, by which with only seven men he captured Captain French and one hundred and eleven British soldiers, and five vessels on the Ogeechee river. He did this by building large fires in the forest around their camp, thus causing them to suppose that they were surrounded by a greatly superior force.

White county is bounded by the following counties: Towns on the north, Habersham on the east and southeast, Hall on the south, Lumpkin on the west, and Union on the northwest.

It is watered by the Chattahoochee and Tesentee rivers, and by Duke's, Smith's, Sautee, Shoal, Blue and Mossy creeks. The face of the country is generally hilly and in many places mountainous. The Blue Ridge mountains traverse the northern section. The most noted peaks are Tray and Yonah. From the summit of the latter Stone Mountain can be distinctly seen with the naked eye.

The lands suitable for cultivation are generally in the valleys. When skillfully cultivated they will yield to the acre: corn, 25 bushels; oats, 20 bushels; wheat and rye, 15 bushels; Irish potatoes, 150 bushels; sweet, or Spanish potatoes, 150; field-peas, 30 bushels; ground-peas, 60 bushels; rice, 75 bushels; seed-cotton, 600 pounds; crab-grass hay, 1,500 pounds; bermuda grass and clover hay, each 2,000 pounds; herd's-grass hay, 3,000 pounds; sorghum syrup, 100 gallons.

All the above named grasses do well, and so do orchard-grass, blue-grass and millet.

The various grasses give an abundance of the best summer pastureage. There is much improvement in all kinds of stock. In 1890 White county had 2,830 sheep, with a wool-clip of 5,696 pounds; 3,517 cattle, 594 being working oxen, and 1,151 milch-cows; 465 horses, 460 mules, 7 donkeys, 5,197 hogs, and 47,796 of all kinds of domestic fowls. It is estimated that there are 200 goats in the county.

Among the farm products in 1890, were 281,301 gallons of milk, 85,063 pounds of butter, 105 pounds of cheese, 10,329 pounds of honey, and 55,662 dozens of eggs.

In this county there are 500 acres devoted to apples, 200 to peaches, 100 to pears, and 40 to plums and cherries. Some fine grapes are raised. About 10 per cent. of these are sold in the markets and from 20 per cent. wine is made.

Many vegetables are raised. In mid-winter there are shipped from this county large white, crisp cabbage heads, barrels of sauerkraut, and many wagon loads of luscious apples.

Nacoochee Valley, which has already been described in the general sketch, is about eight miles long, and from one-fourth to three-fourths of a mile wide.

Of original forests about 100,000 acres remain, on which the timbers are pine, white, red, Spanish and post-oak, chestnut, hickory, cherry and walnut. Four sawmills are employed in getting out lumber.

The water powers of the county are utilized to some extent in operating 15 grist-mills. In a few of these flour also is made.

In this county the first gold mines in Georgia were discovered. Gold and asbestos are still mined to a considerable extent. There are five successful gold mills and several placer mines. There are some 20 mines and quarries employing 150 hands at wages of 80 cents a day.

The Baptists and Methodists are very numerous, and their churches are scattered over the county.

There are 25 schools for whites, and 3 for colored, with an average attendance of 591 whites and 65 colored.

Most of the products are marketed at Gainesville in Hall county.

According to the report of the United States census of 1900 there were ginned in this county in the season of 1899-1900, only 150 bales of upland cotton.

Cleveland, the county site, was named for Hon. Benjamin Cleveland, for many years a representative in the Georgia Legislature.

In 1834 a subterranean village was discovered in Nachoochee Valley by some miners. It was covered to a depth of from 7 to 9 feet. Some

of the houses were embedded in a stratum of auriferous gravel. They are 34 in number, built of logs six to ten inches in diameter, and from ten to twelve feet long. In the rooms were found cane baskets, fragments of earthenware, and specimens of curious workmanship, such as crucibles and mortars.

The area of White county is 243 square miles, or 155,520 acres.

Population of White county in 1900, 5,912, a decrease of 239 since 1890.

By the Comptroller-General's report for 1900 there were: acres of improved land, 142,915; acres of wild land, 29,439; average value of improved land, \$2.79; of wild land, \$0.17; school fund, \$4,160.39; city and town property, \$10,565; money and solvent debts, \$66,210; value of merchandise, \$14,077; cotton manufactories, \$600; capital invested in mining, \$10; value of household and kitchen furniture, \$21,124; farm and other animals, \$63,382; plantation and mechanical tools, \$13,309; watches, jewelry, etc., \$1,544; value of all other property, \$6,012; real estate, \$415,055; personal estate, \$190,479; aggregate value of whole property, \$605,534.

Property returned by colored taxpayers: acres of land, 835; value of land, \$1,995; city or town property, \$100.00; money and solvent debts, \$155.00; household and kitchen furniture, \$797.00; watches, jewelry, etc., \$55.00; farm and other animals, \$2,602; plantation and mechanical tools, \$416.00; value of all other property, \$107.00; aggregate value of whole property, \$6,227.

The tax returns for 1901 show a gain of \$15,535 in the value of all property over the returns of 1900.

Population of White county by sex and color, according to the census of 1900: white males, 2,626; white females, 2,686; total white, 5,312; colored males, 304; colored females, 296; total colored, 600.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 2 calves, 6 dairy cows, 5 horses, 10 mules, 3 swine.

WHITFIELD COUNTY.

Whitfield County was laid out from Murray in 1851, and named in honor of the celebrated George Whitefield, the most renowned pulpit orator of his day, a companion of the Wesleys, and founder of the Bethesda Orphan Home near Savannah. He was a man of unbounded influence for good, both in England and America.

Whitfield county is bounded on the north by the State of Tennessee, on the east by Murray county, on the south by Gordon county, on the west by Catoosa and Walker counties, the latter of which also bounds a portion of it on the south.

The Connesauga river divides it from Murray county on the east. Other streams are Chickamauga, Sugar, Swamp, McCoy, Tiger, Coahulla and Mill creeks.

Two great railway systems traverse the county, crossing each other diagonally at Dalton. These are the Southern and the Louisville and Nashville, through the latter's control of the Western and Atlantic, or State

road. The soils are varied. Agriculture is much diversified, and excellent opportunities are afforded for the marketing of fruits and vegetables.

The average yield of the various crops to the acre under fair cultivation is: corn, 20 bushels; oats, 30 bushels; wheat, 10 bushels; rye, 12 bushels; Irish potatoes, 100 bushels; sweet potatoes, 50 bushels; field-peas, 15 bushels; seed-cotton, 550 pounds; crab-grass hay, 2,000 pounds; clover hay, 2,500 pounds; fodder, 1,000 pounds; sorghum syrup, 100 gallons. Some of the best lands yield 30 bushels of wheat to the acre and from 3,000 to 6,000 pounds of hay from clover, the various grasses and peavines.

The summer pasturage is excellent and the best of cattle feed is supplied by cotton-seed meal, hulls, peas, and the nourishing hay from the grasses already named.

The 12 dairy farms of the county have about 200 Jersey cows and 100 more of improved breeds. People are also taking great interest in improving the breeds of the cattle. In 1890 there were in Whitfield county 6,061 cattle, 222 being working oxen, and 2,343 milch-cows; 1,417 horses, 980 mules, 11 donkeys, 8,047 hogs, 76,023 domestic fowls and 3,846 sheep, with a wool-clip of 6,155 pounds.

Among the farm products were 724,048 gallons of milk, 236,412 pounds of butter, 161,932 dozens of eggs, and 12,719 pounds of honey.

Game and fish are both on the increase.

There are many market gardens supplying every kind of vegetable, melons, berries, grapes and plums.

There are 1,000 acres devoted to peaches, 500 to apples, 100 to plums, 50 to cherries and pears, and 10 to quinces. To grapes 100 acres are devoted. About one-fourth of those raised are sold in the markets. Wine is made from about 75 per cent. of the remainder.

There is near Dalton one florist establishment.

The forest growth is pine, the various kinds of oak, maple, cherry, poplar, etc. The average price is about \$10 a thousand feet.

There is a considerable quantity of iron, bauxite, manganese, silica, marble, sandstone, limestone and clay.

The county has good water-powers, of which about 130 horse-powers are utilized.

Dalton, the county site, a city of 4,315 inhabitants, is situated in a fertile valley and surrounded by mountain ranges. It has a handsome court-house, valued at \$33,000, 2 banks with a capital of \$165,000, a gas plant valued at \$15,000, and water-works at \$50,000, many flourishing commercial and manufacturing establishments, houses of worship belonging to the Methodists, Baptists, Presbyterians and Roman Catholics, a Methodist female college, a high school and public schools of lower grades for white and colored.

At the Crown Cotton Mills, built by home capital and whose capacity has been doubled in the last two years, are 20,000 spindles and 500 looms. Their capital is valued at \$500,000, and they consume annually 13,000 bales of cotton. The three flouring-mills turn out about 500 barrels of flour in a day during the busy season. These mills have an ag-

gregate value of \$100,000. There are two lumber and machine factories, two foundries, one canning factory, and a sausage factory with cold-storage for summer slaughtering.

There is also at Dalton the Showalter Publishing Company, one of the best establishments of the kind in the State of Georgia.

The Dalton district, which includes the city, has a population of 6,400

There are in the whole county some 40 lumber or sawmills. Most of these are operated by steam.

Besides the 13,000 bales of cotton used by the mills of Dalton, 8,000 bales are shipped from that enterprising little city. 1,947 bales of upland cotton were ginned in this county during the season of 1899-1900.

In Whitfield county there are 42 schools for whites, and six for colored belonging to the public school system of the State. The total average attendance is 1,148 white pupils, and 129 colored.

The smaller towns in Whitfield county are Tilton, Tunnel Hill and Cohutta.

The area of Whitfield county is 285 square miles, or 182,400 acres.

Population in 1900, 14,509, a gain of 1,593 since 1890; school fund, \$9,441.64.

By the report of the Comptroller-General for 1900 there are: acres of improved land, 167,580; of wild land, 7,708; average value per acre of improved land, \$2.15; of wild land, \$1.09; city and town property, \$767,784; shares in bank, \$50,000; sinking fund or surplus, \$26,000; gas company, \$15,000; building and loan association, \$12,000; money and solvent debts, \$365,970; merchandise, \$177,803; cotton manufactories, \$338,892; iron works, \$13,800; household and kitchen furniture, \$159,071; farm and other animals, \$194,076; plantation and mechanical tools, \$55,117; watches, jewelry, etc., \$11,066; value of all other property, \$91,498; real estate, \$1,552,258; personal estate, \$1,540,664. Aggregate value of whole property, \$3,092,922.

Property returned by colored taxpayers: acres of land, 2,572; value of same, \$7,511; city or town property, \$31,505; money and solvent debts, \$464; household and kitchen furniture, \$5,945; watches, jewelry, etc., \$54; farm and other animals, \$6,377; plantation and mechanical tools, \$1,159; value of all other property, \$840.00. Aggregate value of whole property, \$56,897.

The tax returns for 1901 show an increase of \$89,675 in the value of all property over the returns of 1900.

Population of Whitfield county by sex and color, according to the census of 1900: white males, 6,257; white females, 6,426; total white, 12,683; colored males, 878; colored females, 948; total colored, 1,826.

Population of the city of Dalton by sex and color, according to the census of 1900: white males, 1,583; white females, 1,773; total white, 3,356; colored males, 434; colored females, 525; total colored, 959.

Total population of Dalton, 4,315.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 54 calves, 17 steers, 1 bull, 290 dairy cows, 227 horses, 41 mules, 5 donkeys, 402 swine, 2 goats.

WILCOX COUNTY.

Wilcox County was formed from Dooley, Irwin and Pulaski in 1857, and named for General Mark Wilcox, of Telfair county, who was for many years a representative in the State Legislature. It is bounded north by Pulaski, east by Dodge and Telfair, south by Irwin and west by Dooley.

The Ocmulgee river runs along its whole eastern boundary, the Allapaha river is on the southwest. It is also watered by Bluff, Cedar, House and Otter creeks, all tributaries of the Ocmulgee, and in the southwest are two tributaries of the Allapaha.

The Ocmulgee gives river transportation. On its western bank is Abbeville, the county site, which is also furnished with railroad facilities by two branches of the Georgia and Alabama Railroad, itself a part of the Seaboard Air Line system. Two branches of the Hawkinsville and Florida Southern connecting with this system, give railroad advantages to the western side of the county. The Abbeville district has a population of 2,090, of which 1,152 are in the town.

The face of the country is generally level. The soil is mostly gray in the piny woods; on the bottom lands along the creeks and rivers, dark, alluvial and more productive. The average yield to the acre with good culture and favorable seasons is: corn, 15 bushels; oats, 20 bushels; wheat, 7 bushels; rye, 5 bushels; Irish potatoes, 75 bushels; sweet potatoes, 100 bushels; field-peas, 10 bushels; ground-peas, 40 bushels; upland seed cotton, 800 pounds; crab-grass hay, 2,000 pounds; sugar-cane syrup, 250 gallons.

In 1890 Wilcox county had 7,498 sheep, with a wool-clip of 12,110 pounds; 5,103 cattle, 375 being working oxen, and 1,659 milch-cows with a fair number of pure breeds recorded; 525 horses, 329 mules, 2 donkeys, 11,390 hogs and 24,552 domestic fowls. Among the farm products are 109,152 gallons of milk, 14,438 pounds of butter, 18,081 dozens of eggs and 722 pounds of honey.

Vegetables of all kinds do well. This county is in one of the finest peach and grape sections of the south, and the people are showing commendable energy in utilizing these advantages. Lands and labor are cheap and capital well invested will pay fine dividends.

The rivers and creeks afford fine fish and such game as quail and doves are plentiful.

Rosin, lumber and turpentine give steady and profitable employment to many of the citizens.

This county is growing steadily in population.

Abbeville, the county site, which, in 1880, had 61 inhabitants, had in 1890 a population of 657, which had increased by 1900 to 1,152, while the whole Abbeville district contained 2,090 inhabitants.

Seville, on the western side of the county and connected with Abbeville by rail, has a population of 1,277, while Rochelle, half way between them, has 793 inhabitants, and the whole district of Rochelle has 1,960 people.

There are 36 white schools and 11 colored. The average attendance is 829 white pupils and 357 colored.

Methodists, Baptists and Presbyterians are the leading denominations. Churches are located in every section of the county.

Area of Wilcox county 544 square miles, or 348,160 acres. Population in 1900, 11,097, a gain of 3,117 since 1890; school fund \$6,931.09.

By the Comptroller-General's report for 1900, there are: acres of improved land, 252,210; of wild land, 80,370; average value to the acre of improved land, \$2.15; of wild land, \$1.09; city and town property, \$145,364; money and solvent debts, \$92,048; merchandise, \$55,781; capital invested in shipping and tonnage, \$25; household and kitchen furniture, \$84,731; farm and other animals, \$165,143; plantation and mechanical tools, \$30,213; watches, jewelry, etc., \$4,388; value of all other property, \$113,859; real estate, \$778,695; personal estate, \$548,771. Aggregate value of whole property, \$1,327,466.

Property returned by colored taxpayers: acres of land, 8,730; value of same, \$16,756; city and town property, \$4,591; money, etc., \$357; merchandise, \$100; household and kitchen furniture, \$8,000; watches, jewelry, etc., \$221; farm and other animals, \$9,189; plantation and mechanical tools, \$1,298; value of all other property, \$1,963. Aggregate value of whole property, \$42,475.

The tax returns for 1901 show a gain of \$124,600 in the value of all property since 1900.

By the census of 1900 the cotton ginned in this county in the season of 1899-1900, was 3,820 bales of upland and 65 of sea-island cotton.

Population of Wilcox county by sex and color, according to the census of 1900: white males, 3,568; white females, 3,325; total white, 6,893; colored males, 2,272; colored females, 1,932; total colored, 4,204.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 134 calves, 74 steers, 16 bulls, 186 dairy cows, 49 horses, 45 mules, 879 swine, 54 goats.

WILKES COUNTY.

Wilkes County was laid out in 1777, and named in honor of John Wilkes, the great champion of American liberty. In 1790 a part of it was set off to Elbert county; part to Warren in 1793; a part to Lincoln in 1796; part to Greene in 1802, and other parts to Taliaferro in 1825 and 1828. It is bounded by the following counties: Elbert on the north, Lincoln on the east, McDuffie, Warren and Taliaferro on the south, Taliaferro on the southwest, Oglethorpe on the west and northwest.

Broad river is on its northern and Little river on its southern border. The creeks are Beaverdam, Fishing and Kettle creeks.

The surface of the country is undulating and the soil varied. The light sandy lands produce well for a few years. By careful cultivation and judicious fertilizing they can be built up and enabled to retain their productiveness. The best lands are on Broad and Little rivers and their tributary creeks. The average yield to the acre is, according to location and culture, as follows: corn, 15 to 25 bushels; oats, 20 to 30;

wheat, 10 to 15; rye, 10 to 12; Irish potatoes, 50 to 75; sweet potatoes, 80 to 120; field-peas, 12; ground-peas, 50; seed cotton, 800 pounds; corn fodder, 400 pounds; crab and bermuda grass hay, 3,000 pounds each; sorghum syrup, 80 gallons; sugar-cane syrup, 90 gallons. Nearly every part of the county is well adapted to the grasses and clover. Bermuda and crab-grass furnish good pasturage for six month of the year; for the other six, rye, clover, barley and the stubble fields, aided by swamp cane.

Dairying is carried on to some extent, and more attention is being given to beef cattle. In 1890 Wilkes county had 5,525 cattle, 282 being working oxen, and 2,369 milch-cows; 1,153 horses, 1,977 mules, 2 donkeys, 7,906 hogs, 85,815 domestic fowls, 1,578 sheep, with a wool-clip of 3,186 pounds. Among the farm products were 512,912 gallons of milk, 131,905 pounds of butter, 60 pounds of cheese, 77,025 dozens of eggs and 13,685 pounds of honey.

Vegetables, melons, berries and small fruits are raised in quantities sufficient for home consumption. The area given to peaches is 6,000 acres; to apples, 5,000; to cherries, 200.

There are about 50,000 acres of original forest still standing, the timbers being hickory, white oak, maple, dogwood, gum, post oak and ash.

There are fine water-powers in the county, those at Anchovy Shoals being 75,000 horse-powers.

Granite, quartz, and some iron, gold and soapstone, are found.

In July, 1901, the presence of gold on the farm of Hon. L. W. Latimer, in the northern portion of Wilkes, was proven by the collection of a thousand pounds of dirt, which was sent to the stamping machines at the Columbia gold mines in an adjoining county. The 1,000 pounds yielded a lump of gold which was estimated to be worth from \$1,500 to \$1,750.

On the southern border of the county the Seminole Mining Company, backed by western capital, have just sunk a new shaft at the Magruder mines with satisfactory results.

The Columbia Mining Company, also on the southern border, is a well-paying piece of property, claiming to be worth, \$300,000.

The manufacturing establishments are a knitting-mill, a stove factory, a cotton seed oil-mill worth \$50,000, ten flour and grist-mills whose aggregate value is \$20,000; six lumber and sawmills, one wagon, carriage and buggy factory, one plow and cotton-gin factory, two box and barrel factories.

The cotton ginned in Wilkes county during the season of 1899-1900 is given in the United States census report for 1900 as 17,405 bales (upland).

Washington, the county site, is one of the most beautiful towns in the State. It has a population of 3,300 in the corporate limits, and 4,436, counting the whole Washington district; a court-house worth \$40,000, two banks with an aggregate capital of \$100,000, about 30 mercantile establishments, four life and fire insurance agencies, a water-

works plant, and churches of the Methodists, Baptists, Presbyterians, Episcopalians, Roman Catholics and Christian Scientists. The two first named are in the lead.

There are also good schools in Washington and in the county. There are 42 schools for whites and 30 for colored pupils. The average attendance is 916 white and 861 colored.

Wilkes county has been the home of many of the most distinguished men of Georgia. Among them are General Elijah Clarke, a native of North Carolina, who settled in Wilkes county and for his services to Georgia and the cause of freedom deserves as high a niche in the temple of fame as do Marion and Sumter for similar but not greater service in South Carolina; Colonel John Dooly, who with his friend Elijah Clarke and with General Andrew Pickens, of South Carolina, won great praise by the magnificent victory over the Tories at Kettle creek in Wilkes county, and who, after the fall of Augusta in 1780, was murdered in the presence of his family by a marauding band of Tories; Peter Early and Matthew Talbot, each a governor of Georgia and both natives of Virginia; Benjamin Taliaferro, a gallant soldier of the Virginia line during the Revolution, who moved to Georgia in 1785 and became a trustee of Franklin College, President of the Georgia Senate, and one of the judges of the Superior Court, being elected to that position by the Legislature, the only man in the history of the State to be elected to such a position without being a lawyer; Stephen Heard, who came from Virginia to Georgia before the Revolution, was one of the governors of the State during that stormy period, and for a while had his capital at Heard's Fort, in Wilkes county; Duncan G. Campbell, a distinguished lawyer and great friend of female education, who for several years represented Wilkes county in the legislature; John A. Campbell, Justice of the United States Supreme Court, and later one of the Confederate Commissioners to the Peace Conference at Fortress Monroe, in 1865; Rev. Jesse Mercer, who was born in Halifax county, North Carolina December 16, 1769, was ordained a minister of the Baptist Church before he was 20 years of age, removed to Georgia, was a member of the convention which framed the Constitution of 1798, and at his death in 1841, was buried in Penfield, at that time the site of Mercer University; Robert Toombs, who was born in Wilkes county, July 2, 1810, was one of the grandest orators that America ever produced, represented Georgia for many years in the United States Senate, was the first secretary of State of the Confederate States, went to the field as a brigadier-general, was distinguished in Georgia politics after the war and died in Washington in his native county December 15, 1885.

In this county lived Mrs. Hannah Clarke, wife of General Elijah Clarke, and one of the noted heroines of the Revolution, who died on the 26th of August, 1827, aged, 90 years.

In the town of Washington lived Mrs. Hillhouse, widow of David Hillhouse, who took charge of and conducted a newspaper, styled the Monitor and Observer, wrote editorials, set type, did the State printing, raised and educated her three children, and at her death left to each a legacy of ten thousand dollars. While John Milledge was governor of

Georgia he gave to this noble woman, as far as he could, the patronage of the State.

Colonel John Graves, a native of Virginia, distinguished in the armies of Washington and Greene, who settled in Georgia after the war of the Revolution, was another distinguished citizen of Wilkes, as was also Colonel Nicholas Long, distinguished for his services in the war for independence and in the second war with Great Britain.

The area of Wilkes county is 501 square miles, or 320,640 acres. Population in 1900, 20,866, a gain of 2,785 since 1890; school fund, \$11,550.10.

By the report of the Comptroller-General there are: acres of improved land, 294,796; average value per acre, \$2.84; city and town property, 561,045; shares in bank, \$124,380; money and solvent debts, \$285,410; merchandise, \$124,520; stocks and bonds, \$51,875; cotton manufactories, \$36,400; capital invested in mining, \$400; household and kitchen furniture, \$111,445; farm and other animals, \$172,720; plantation and mechanical tools, \$45,095; watches, jewelry, etc., \$8,960; value of all other property, \$47,008; real estate, \$1,664,754; personal estate, \$1,037,533. Aggregate value of whole property, \$2,702,287.

Property returned by colored taxpayers: acres of land, 13,621; value of land, \$52,040; city and town property, \$58,315; money, etc., \$935; merchandise, \$600; household and kitchen furniture, \$16,185; watches, jewelry, etc., \$115; farm and other animals, \$37,430; plantation and mechanical tools, \$7,075; value of all other property, \$3,105. Aggregate value of whole property, \$179,430.

Population of Wilkes county by sex and color, according to the census of 1900: white males, 3,218; white females, 3,205; total white, 6,423; colored males, 7,074; colored females, 7,369; total colored, 14,443.

Population of the town of Washington by sex and color, according to the census of 1900; white males, 528; white females, 608; total white, 1,136; colored males, 1,000; colored females, 1,164; total colored, 2,164.

Total population of Washington, 3,300.

Domestic animals in barns and inclosures not on farms or ranges, June 1, 1900: 30 calves, 12 steers, 4 bulls, 105 dairy cows, 142 horses, 27 mules, 1 donkey, 156 swine.

WILKINSON COUNTY.

Wilkinson County was laid out by the lottery act of 1803, and organized in 1805. A part of it was added to Baldwin in 1807, and a part set off to Twiggs in 1809. It was named for General James Wilkinson, an active participant in the war of the Revolution, and afterwards in that of 1812. It is bounded by the following counties: Baldwin on the north, Baldwin, Washington and Johnson on the northeast, Laurens on the southeast, Twiggs on the southwest, and Jones on the northwest.

The Oconee river flows along the northeastern boundary. It is also watered by Big Sandy and Commissioner's creeks, tributaries of the Oconee. The streams abound in fish. There is a considerable pond or small lake in the northeastern section of the county.

The main line of the Central of Georgia Railway traverses the county, while a branch road of the same great system, starting from the town of Gordon and passing through Milledgeville and Eatonton, terminates at Covington on the Georgia Railroad.

The soil belongs to the tertiary formation, and consists of gray, sandy lands, level or slightly rolling with red outcrops in the central portion of the county. The lands on an average make the following yield to the acre: corn, 9 bushels; oats, 8 2-3 bushels; wheat, 4 bushels; Irish potatoes, 50 bushels; sweet potatoes, 75 bushels; field-peas, 12 bushels; ground-peas, 30 bushels; seed cotton, 550 pounds; crab-grass hay, 2,000 pounds; sugar-cane syrup, 250 gallons. But the best lands go far ahead of these figures on corn, oats and wheat, averaging as follows: corn, 15 bushels to the acre; oats, 25 bushels; wheat, 10 bushels.

In 1890 Wilkinson county had 881 sheep, with a wool-clip of 1,483 pounds, 4,952 cattle, 363 being working oxen and 1,757 milch-cows; 754 horses, 1,246 mules, 9 donkeys, 16,780 hogs and 50,474 domestic fowls. Among the farm products were 251,209 gallons of milk, 64,239 pounds of butter, 18,717 pounds of honey and 95,355 dozens of eggs.

Vegetables, berries, melons and fruits are raised for home consumption. The amount of truck sold is less than \$1,500 worth.

Rotten limestone abounds in this county. Near Irwinton is a quarry of the soft kind, which, upon exposure to the air, becomes hard. It has been found useful in the construction of chimneys.

On the tributaries of the Oconee are 21 grist-mills, using 246 horse-powers.

The forest growth is long-leaf pine on gray lands, oak and hickory on red lands and swamp timber along the creeks. The timber products are considerable, the annual output being about \$30,000.

Of all manufactories in the county the annual output is about \$91,310.

Irwinton, the county seat, has a population of 227, though Irwinton district contains, 1,993 people.

The largest town in the county is Gordon, with 509 inhabitants in the town, while the whole of Ramah district, which includes Gordon, contains 1,597 people.

Baptists and Methodists are the leading denominations.

There are in the county 41 schools for whites and 23 for colored. The average attendance for the former is 830, for the latter 848.

The area of Wilkinson county is 431 square miles, or 275,840 acres. Population in 1900, 11,440, a gain of 659 since 1890; school fund, \$7,819.16.

According to the Comptroller-General's report for 1900, there are: acres of improved land, 275,464; average value per acre, \$2.13; city and town property, \$44,677; building and loan association, \$10; money and solvent debts, \$116,576; merchandise, \$27,614; stocks and bonds, \$9,350; cotton manufactories, \$1,255; household and kitchen furniture, \$76,535; farm and other animals, \$154,152; plantation and mechanical tools, \$36,551; watches, jewelry, etc., \$5,223; value of all other property, \$38,015; real estate, \$631,179; personal estate, \$498,008. Aggregate value of whole property, \$1,128,187.

Property returned by colored taxpayers: acres of land, 7,508; value of land, \$18,196; city and town property, \$2,895; money, etc., \$317; merchandise, \$120; household and kitchen furniture, \$15,689; watches, jewelry, etc., \$438; farm and other animals, \$25,672; plantation and mechanical tools, \$6,012; value of all other property, \$4,249. Aggregate value of whole property, \$78,663.

According to the report of the United States census for 1900 there were ginned in Wilkinson county 11,037 bales of upland cotton during the season of 1899-1900.

The tax returns for 1901 show a gain of \$13,401 in the value of all property over the returns of 1900.

Population of Wilkinson county by sex and color, according to the census of 1900: white males, 2,726; white females, 2,683; total white, 5,409; colored males, 2,981; colored females, 3,050; total colored, 6,031.

Domestic animals in barns and inclosures, not on farms or ranges, June 1, 1900: 15 calves, 5 steers, 3 bulls, 36 dairy cows, 26 horses, 9 mules, 125 swine.

WORTH COUNTY.

Worth County was laid out in 1856 from Irwin and Dooly, and was named in honor of General William Worth, of New York, a son-in-law of General Zachary Taylor, who distinguished himself in the Mexican war, while fighting under Taylor in northern Mexico, and later under Scott in the valley of the city of Mexico. This county is bounded by the following counties: Dooly on the north, Irwin and Berrien on the east, Colquitt on the south, Mitchell, Dougherty and Lee on the west, and Lee on the northwest.

The Flint river flows along its northwestern border, and Little river on the eastern side. On its northeastern side is Swift creek, and a little south of that, Jones creek. Other streams are Indian, Warrior, Ty Ty, Abram's and Mill creeks.

The county is traversed by the Brunswick and Western Railway of the Plant System and by the Tifton, Thomasville and Gulf Railway. The Georgia Northern penetrates the county as far as Carlisle on the southwest.

The face of the country is level, having a light, sandy soil with clay subsoil. On the creek bottoms the soil is alluvial and very productive.

The cultivating of grass for hay is yet in its incipiency; but experiments have proved very satisfactory. Crab-grass, which grows to perfection, is harvested with a mixture of peavine after oats. About 4,000 acres have given a yield of 5 tons (10,000 pounds) to the acre of this mixed hay.

The average yield to the acre for the whole county, according to location and culture, is: corn, 10 to 18 bushels to the acre; oats, 10 to 25 bushels; rye and wheat, 10 bushels each; upland rice, 10 bushels; Irish and sweet potatoes from 125 to 300 bushels each; field-peas, from 10 to 20 bushels; ground-peas, from 10 to 60 bushels; chufas, 20 bushels;

upland seed cotton, from 750 to 1,000 pounds; sea-island cotton, 800 pounds; crab-grass hay, 5,000 pounds, but 10,000 on the best lands; sorghum forage, 10,000 pounds; corn fodder, 200 pounds; sugar-cane syrup, 250 to 300 gallons.

There is an increased interest in beef cattle and in better milk breeds, the Jersey being the favorite milch-cow. The pasturage is excellent, besides which, cattle are fed on hay, bran and cotton seed meal.

In 1890 Worth county had 15,026 cattle, 269 being working oxen and 3,897 milch-cows, of which there were 115 from pure breed to one half bred and higher. The production of milk was 313,918 gallons, and of butter, 68,184 pounds. The 14,294 sheep gave a wool-clip of 32,629 pounds. There were 703 horses, 1,118 mules, 20,557 hogs and 51,310 domestic fowls of all varieties. The production of eggs was 79,219 dozens, and of honey, 3,899 pounds.

Quail and doves constitute the game of the county.

Vegetables, berries and melons in sufficient quantities for home consumption are raised. The people raised fewer melons than usual in 1900, alleging as a reason the freight rates, which ate up all the profits.

The acreage devoted to peaches is 1,000; to apples, 200; to pears, 400; to plums and cherries, 50 each. There are 4 vineyards, embracing in all 150 acres. About half of the grapes are sold in the markets, and from 25 per cent. of the whole number raised wine is made. From Poulan, thousands of grapes are shipped.

About 5,000 acres of woodland consist of pine, and 5,000 of cypress, hickory and gum. The annual output of lumber is 6,000,000 superficial feet, selling at an average price of \$8.00 a thousand feet.

The minerals are clay, limestone and sandstone, but none of them are at this time being mined.

There are excellent water-powers in the county. Two hundred horse-powers are used by Mercer's flour and grist-mill. At Sylvester are two such mills, of which Haine's Mill is operated by water and Welch's by steam. At Willingham there is a large lumber and shingle mill; also large planing-mills with a drying capacity of 20,000 feet a day. At Ashburn are mills with a capacity of 50,000 feet of rough lumber and 50,000 shingles a day; also planing-mills with a capacity of 25,000 to 30,000 feet in a day. There are in the county several smaller mills with a capacity of from 5,000 to 6,000 feet a day.

There are in operation 12 turpentine stills. There is a fertilizer manufactory in course of construction at Sylvester, and a cotton factory being built at Poulan.

There are in the county two wagon and carriage factories, valued at \$1,000 each.

Isabella, the county seat, has a court-house worth \$20,000. There are in the county three banks, one at Sylvester with a capital of \$15,000, one at Poulan, \$15,000, and one at Ashburn, \$20,000. There are 2 life and fire insurance agencies at Sylvester, one at Ty Ty, and 2 at Ashburn. In each of these towns are several successful mercantile establishments.

Ashburn, with a population of 1,301, is the largest town in the county. The district including Ashburn has 3,025 inhabitants. Next is Sylvester,

with 552 inhabitants. The whole district which includes it has a population of 1,612.

The receipts and shipments of cotton from the entire county are 7,500 bales. Of these 3,000 are handled at Sylvester. By the census report of 1900 there were ginned in this county 9,296 bales of upland and 1,189 bales of sea-island cotton during the season of 1899-1900.

Baptists and Methodists are the leading denominations, and their churches are scattered all over the county.

Worth county has 51 schools for white pupils and 23 for colored, with an average attendance in the white schools of 1,544 and in the colored schools of 762.

The area of Worth county is 778 square miles, or 497,920 acres. Population in 1900, 18,664, an increase of 8,616 since 1890; school fund, \$10,421.57.

By the Comptroller-General's report for 1900 there are: acres of improved land, 372,328; of wild land, 80,351; average value per acre of improved land, \$2.53; of wild land, \$1.29; city and town property, \$175,131; shares in bank, \$18,261; money and solvent debts, \$198,347; merchandise, \$110,879; stocks and bonds, \$1,718; cotton manufactories, \$7,162; iron works, \$5,025; mining, \$135; household and kitchen furniture, \$134,151; farm and other animals, \$274,382; plantation and mechanical tools, \$52,862; watches, jewelry, etc., \$7,610; value of all other property, \$183,512; real estate, \$1,197,840; personal estate, \$998,943. Aggregate value of whole property, \$2,196,783.

Property returned by colored taxpayers: acres of land, 10,806; value of same, \$26,210; city and town property, \$6,499; merchandise, \$717; money and solvent debts, \$900; household and kitchen furniture, \$18,409; watches, jewelry, etc., \$287; farm and other animals, \$26,312; plantation and mechanical tools, \$5,627; value of all other property, \$1,395. Aggregate value of whole property, \$86,356.

The tax returns for 1901 show an increase of \$240,561 in the value of all property, as compared with the returns for 1900.

Population of Worth County by sex and color, according to the census of 1900: white males, 5,286; white females, 4,966; total white, 10,252; colored males, 4,584; colored females, 3,828; total colored, 8,412.

Domestic animals in barns and inclosures, not on farm or ranges, June 1, 1900: 221 calves, 204 steers, 11 bulls, 260 dairy cows, 163 horses, 275 mules, 1,601 swine, 12 goats.

From the Comptroller-General's report for 1901 we take the following:

**STATEMENT SHOWING THE ASSESSED VALUE OF THE WHOLE TAX-
ABLE PROPERTY OF THE STATE AND THE STATE TAX
LEVY FOR EACH OF THE YEARS, BEGIN-
NING WITH 1879.**

YEAR.	Property on Digest.	Railroad Property.	Total.	State Tax Rate.
1879.....	\$ 225,993,419	\$ 9,866,129	\$ 234,959,548	8½ mills.
1880.....	238,934,126	12,490,525	251,424,651	8½ "
1881.....	254,252,680	16,741,258	270,993,888	8 "
1882.....	268,519,976	18,729,427	287,249,403	8 "
1883.....	284,881,951	22,030,404	306,921,855	2½ "
1884.....	294,885,870	22,188,901	317,074,271	8 "
1885.....	299,146,798	22,548,818	321,695,616	8½ "
1886.....	306,507,578	22,981,927	329,489,555	3½ "
1887.....	316,605,328	24,899,593	341,504,921	8.77 "
1888.....	327,863,331	29,304,127	357,167,458	8.56 "
1889.....	345,938,837	34,250,477	380,189,314	4 "
1890.....	377,866,784	38,462,161	415,828,945	3.96 "
1891.....	402,586,468	42,383,287	444,969,755	5.08 "
1892.....	421,149,509	42,604,025	463,753,534	4.85 "
1893.....	410,644,753	42,000,154	452,644,907	4.61 "
1894.....	388,428,748	40,584,775	429,012,923	4.87 "
1895.....	370,739,521	39,952,572	410,692,093	4.56 "
1896.....	370,526,638	42,780,835	413,307,473	4.56 "
1897.....	370,034,912	42,286,457	412,321,369	5.21 "
1898.....	369,118,403	42,695,508	411,813,911	6.21 "
1899.....	372,927,077	43,933,411	414,960,488	5.96 "
1900.....	388,154,413	46,181,721	434,336,134	5.20 "
1901.....	404,792,187	51,554,897	456,347,084	5.44 "

To the railroad assessments must be added the estimated value of the property of the roads having charter exemptions from *ad valorem* taxation, which, at a conservative valuation, is worth \$20,000,000, which would make the total value of this property \$71,554,897.

In order to show in detail to what extent some of the chief classes of our property have increased, the following interesting statement is taken from the Comptroller-General's report:

	1879	1899	1900	1901
City and town real estate.....	\$49,007,286	\$ 116,258,563	\$ 116,945,650	\$ 119,042,742
Lands.....	90,493,822	119,152,188	120,602,233	124,425,643
Live stock.....	21,017,634	19,968,359	22,418,392	25,241,891
Farm implements.....	2,971,372	4,903,739	5,204,719	6,730,743
Household furniture.....	9,156,404	15,534,560	16,296,369	16,666,166
Merchandise.....	12,012,755	19,211,726	20,425,862	23,879,854
Money, etc.....	25,118,005	33,198,332	34,730,595	34,880,514
Cotton factories.....	1,840,000	11,359,993	13,217,736	18,999,964
Iron works, etc.....	295,640	566,064	440,655	938,629
Bank capital.....	4,667,597	13,389,612	13,892,281	14,264,306
Railroad property.....	9,866,129	43,933,411	46,181,721	51,554,897

From the same report is taken the subjoined

STATEMENT OF PROPERTY RETURNED BY COLORED-TAX-PAYERS
FROM 1879 TO 1901.

1879	\$ 5,182,398
1880	5,764,298
1881	6,478,951
1882	6,589,876
1883	7,582,895
1884	8,021,525
1885	8,158,890
1886	8,655,298
1887	8,986,479
1888	9,681,271
1889	10,415,330
1890	12,822,003
1891	14,196,785
1892	14,869,575
1893	14,960,675
1894	14,387,730
1895	12,941,280
1896	18,292,816
1897	18,619,690
1898	18,719,200
1899	13,560,179
1900	14,118,720
1901	15,629,811

The following is the school fund estimate, 1901 :

Direct levy	\$ 800,000
Poll tax	250,014
Half rental W. and A. railroad	210,206
Liquor tax	182,348
Hire of convicts (net)	81,297
Fees from fertilizers (net)	16,592
Oil fees (net)	8,193
Show tax	4,686
Dividends from Georgia railroad stock	2,046
	<hr/>
	\$ 1,505,127

APPENDIX.

IMPORTANT INFORMATION FROM THE UNITED STATES CENSUS OF 1900.

The total area of Georgia is 59,475 square miles. Of this area the water surface embraces 495 square miles, leaving a land surface of 58,980 square miles.

The tables of population were prepared by Mr. Wm. C. Hunt, chief statistician for population. The director of the United States census is Hon. William R. Merriam.

The population of the State in 1900 is 2,216,331 as against 1,837,353 in 1890, representing an increase since 1890 of 378,978, or 20.6 per cent. This rate of increase is only a little more than that for the decade from 1880 to 1890, when it was 19.1 per cent., and is a little more than two-thirds that for the decade from 1870 to 1880, when it was 30.2 per cent. Georgia had a population at the first census, in 1790, of 82,548, but it increased by 1830 to 516,823, and by 1860 to 1,057,286, having more than doubled during the 30 years from 1830 to 1860. Since 1860 its population has again more than doubled, and is now considerably in excess of two millions.

The population of Georgia in 1900 is very nearly twenty-seven times as large as the population given for 1790, when it was only 82,548.

The total land surface of Georgia is, approximately, 58,980 square miles, the average number of persons to the square mile at the censuses of 1890 and 1900 being as follows: 1890, 31.1; 1900, 37.5. Table 1 shows the land area of each of the counties of Georgia in square miles.

Table 2 shows the population of Georgia at each census from 1790 to 1900, inclusive, while table 3, which immediately follows, shows the population of each county during the same period.

There have been no territorial changes in the counties of Georgia since 1890.

Of the 137 counties in the State all but 9 have increased in population during the decade, the counties showing the largest percentages of increase being Colquitt, 184.4 per cent.; Irwin, 116.0 per cent.; Tattnall, 99.1 per cent.; Laurens, 88.4 per cent.; Johnson, 86.1 per cent.; Worth, 85.7 per cent.; Telfair, 84.0. per cent.; Berrien, 81.7 per cent.; and Montgomery, 76.8 per cent.

The 9 counties showing a decrease in population are Cherokee, Columbia, Dade, Dawson, Greene, Morgan, Putnam, Talbot, and White.

Of the 372 incorporated places there are 40 that have a population in 1900 of more than 2,000, and of these 13 have a population in excess of 5,000.

Atlanta, Augusta, and Savannah are the only cities in Georgia that have a population in 1900 of more than 25,000, and for these cities a summary is presented in table 4, showing the population of each from the first year in which it is separately stated in the census report, to 1900, inclusive, together with the increase by number and per cent. during each of the ten-year periods.

As shown by this summary, Atlanta, the largest city in the State, has a population in 1900 of 89,872 as compared with a population of only 2,572 in 1850; in 1890 it had a population of 65,533, representing an increase during the past ten years of 24,339, or 37.1 per cent., as compared with an increase of 75.1 per cent. during the preceding ten years. Savannah, the second largest city in the State, shows an increase of 25.5 per cent. from 1890 to 1900, its present population being, 54,244 as against 43,189 in 1890; it had a population of 5,166 in 1800, or less than one-tenth of its population in 1900. Augusta, the third largest city in the State, has a population in 1900 of 39,441, showing an increase of 6,141, or 18.4 per cent., since 1890 as compared with an increase of 52.1 per cent. from 1880 to 1890.

Mr. Daniel C. Roper, who made the report on the quantity of cotton ginned in the United States in 1899, says: "As the statistics of this bulletin are based exclusively upon the report secured from cotton ginners, it may be that in some counties the amount of cotton reported as ginned will vary slightly from the amount of cotton reported as grown, and tabulated by the Agricultural Division of this office. This condition will certainly occur where large and important ginneries, located near State or county lines, attract cotton from an adjoining county, or where cotton is grown only to a limited extent in one county and its entire production is ginned and reported in a neighboring county."

Mr. Roper gives the following interesting bit of history, showing the immense influence of the cotton gin upon cotton production in the United States:

"Prior to the invention of the cotton gin by Eli Whitney in 1794, the separation of the seed from the lint cotton was so difficult as to limit the cultivation of cotton. This separation of the seed from the lint had to be done by hand, a task being 4 pounds of lint cotton per week for each head of a family, working at night, in addition to the usual field work. Thus it would take one person two years to turn out the quantity of cotton contained in one average standard bale. One machine will gin from three to fifteen 500-pound bales per day, dependent upon its power and saw capacity.

Possibly no invention has ever caused so rapid development of the industry with which it was associated as that brought through this saw-cotton gin. In 1793, the exportation of cotton from the United States was 487,500 pounds, or 975 bales of an average weight of 500 pounds. In 1794, the year in which the Whitney gin was patented, the number of pounds of cotton exported from the United State was 1,600,000, equivalent to 3,200 bales of a 500-pound standard. This large production so frightened the cotton farmers, in anticipation of an over production of the crop, as to cause them to pledge themselves to desist from

its production. One of these farmers, looking upon his crop gathered for that year, exclaimed, "I have done with the cultivation of cotton; There is enough in that ginhouse to make stockings for all the people in America." And yet within one hundred years, 1800 to 1900, the production of cotton in the United States has increased from 80,000, approximately, to 9,345,391 bales, 500-pound standard, and the crop of 1899 is generally admitted by the ginners, in their reports to this office, to have been small compared with that of 1898."

Table 5 gives the quantity of cotton ginned in Georgia by counties in 1899, the average weight of bales, and the average cost per bale for ginning and baling the crop.

TABLE 5.

TABLE 1.—LAND AREA OF THE COUNTIES OF GEORGIA.

Total	58,980	Cobb	341	Gordon	387	Marion	844	Stewart	440
Appling.. ..	775	Coffee	1,123	Greene	400	Meriwether.....	544	Sumter	534
Baker	366	Colquitt	565	Gwinnett	510	Miller	275	Talbot.....	407
Baldwin	250	Columbia.....	306	Habersham.....	372	Milton.....	147	Taliaferro	198
Banks	216	Coweta	443	Hall	449	Mitchell	542	Tattnall	1,102
Bartow	485	Crawford	334	Hancock.....	523	Monroe	480	Taylor.....	338
Berrien	810	Dade	188	Haralson	282	Montgomery.....	744	Telfair	412
Bibb	254	Dawson.....	209	Harris.....	486	Morgan.. ..	846	Terrell	340
Brooks	463	Decatur	1,010	Hart	257	Murray.....	852	Thomas	713
Bryan	427	DeKalb.....	271	Heard	813	Muscogee.....	255	Towns	168
Bulloch.....	980	Dodge	495	Henry	337	Newton.....	259	Troup	434
Burke	1,043	Dooley	710	Houston	591	Oconee	184	Twiggs	423
Butts.....	179	Dougherty	339	Irwin.....	636	Oglethorpe	575	Union	325
Calhoun	276	Douglas	212	Jackson	460	Paulding	829	Upson	810
Camden	718	Early	503	Jasper	410	Pickens	219	Walker	483
Campbell	205	Echols	365	Jefferson	686	Pierce	518	Walton.....	366
Carroll	486	Effingham	419	Johnson	258	Pike	294	Ware	676
Catoosa... ..	171	Elbert.....	388	Jones.. .. .	397	Polk	292	Warren	298
Charlton	1,063	Emanuel	936	Laurens	791	Pulaski.....	477	Washington	680
Chatham	400	Fannin.....	390	Lee	436	Putnam	848	Wayne	766
Chattahoochee	231	Fayette	215	Liberty	976	Quitman	152	Webster.....	227
Chattooga	326	Floyd	506	Lincoln.....	290	Rabun.....	344	White	243
Cherokee	434	Forsyth	252	Lowndes	455	Randolph.....	476	Whitfield.. ..	285
Clarke.....	159	Franklin	344	Lumpkin	282	Richmond	272	Wilcox	544
Clay... ..	216	Fulton	174	McDuffie	258	Rockdale	121	Wilkes	501
Clayton	142	Gilmer	450	McIntosh.....	429	Schley	188	Wilkinson	431
Clinch.....	1,077	Glascocock	95	Macon	392	Screven	734	Worth	778
		Glynn	468	Madison	278	Spalding	203		

TABLE 2.—POPULATION OF GEORGIA: 1790 TO 1900.

CENSUS YEARS.	Population.	INCREASE.	
		Number.	Per cent.
1900	2,216,381	378,978	20.6
1890.....	1,837,353	295,173	19.1
1880.....	1,542,180	358,071	30.2
1870.....	1,184,109	126,823	11.9
1860.....	1,057,286	151,101	16.6
1850.....	906,185	214,793	31.0
1840.....	691,892	174,569	33.7
1830.....	516,823	175,838	51.5
1820.....	840,985	88,552	35.0
1810.....	252,433	89,747	55.1
1800.....	162,686	80,138	97.0
1790.....	82,548	.....	.....

TABLE 8.--POPULATION OF GEORGIA BY COUNTIES: 1790 TO 1900.

COUNTIES.	1900	1890	1880	1870	1860	1850	1840	1830	1820	1810	1800	1790
The State.....	2,216,331	1,887,353	1,542,180	1,184,109	1,057,286	906,185	691,392	516,823	340,985	252,433	162,686	82,548
Appling.....	12,886	8,676	5,276	5,066	4,190	2,949	2,052	1,468	1,264	.....	.....	.....
Baker.....	6,704	6,144	7,307	6,843	4,965	8,120	4,228	1,253	.....	.....	.....	.....
Baldwin.....	17,768	14,608	18,608	10,618	9,078	8,148	7,250	7,295	7,794	6,356	.....	.....
Banks.....	10,545	8,562	7,887	4,978	4,707	.....	.....	.....	.....	.....	.....	.....
Bartow ¹	20,823	20,616	18,680	16,568	15,724	18,800	9,390	.....	.....	.....	.....	.....
Berrien.....	19,440	10,694	6,619	4,518	3,475	.....	.....	.....	.....	.....	.....	.....
Bibb.....	50,473	42,870	27,147	21,255	16,291	12,699	9,802	7,154	.....	.....	.....	.....
Brooks.....	18,606	18,979	11,727	8,342	6,858	.....	.....	.....	.....	.....	.....	.....
Bryan.....	6,122	5,520	4,929	5,252	4,015	8,424	8,182	3,139	3,021	2,827	2,888	.....
Bulloch.....	21,877	13,712	8,053	5,610	5,668	4,900	3,102	2,587	2,578	2,805	1,913	.....
Burke.....	30,165	28,501	27,128	17,679	17,165	16,100	13,176	11,833	11,577	10,858	9,504	9,467
Butts.....	12,806	10,565	8,811	6,941	6,455	6,488	5,308	4,944	.....	.....	.....	.....
Calhoun.....	9,274	8,438	7,024	5,508	4,913	.....	.....	.....	.....	.....	.....	.....
Camden.....	7,669	6,178	6,183	4,615	5,420	3,819	6,075	4,578	4,341	8,941	1,681	806
Campbell.....	9,518	9,115	9,970	9,176	8,801	7,282	5,370	3,328	.....	.....	.....	.....
Carroll.....	26,576	22,301	16,901	11,782	11,991	9,357	5,252	3,419	.....	.....	.....	.....
Catoosa.....	5,823	5,431	4,739	4,409	5,082	.....	.....	.....	.....	.....	.....	.....
Charlton.....	8,592	3,385	2,154	1,897	1,780	.....	.....	.....	.....	.....	.....	.....
Chatham.....	71,289	57,740	45,023	41,279	31,043	23,901	18,801	14,127	14,737	13,540	12,940	10,769
Chattahoochee.....	5,790	4,902	5,670	6,069	5,797	.....	.....	.....	.....	.....	.....	.....
Chattooga.....	12,952	11,202	10,021	6,902	7,165	6,815	3,488	.....	.....	.....	.....	.....
Cherokee.....	15,243	15,412	14,325	10,899	11,291	12,800	5,895	.....	.....	.....	.....	.....
Clarke.....	17,708	15,186	11,702	12,941	11,218	11,119	10,522	10,176	8,767	7,628	.....	.....
Clay.....	8,563	7,817	6,850	5,498	4,898	.....	.....	.....	.....	.....	.....	.....
Clayton.....	9,599	8,295	8,027	5,477	4,466	.....	.....	.....	.....	.....	.....	.....

¹Name changed from Cass prior to 1870.

Clinch	8,782	6,652	4,138	3,945	3,068	687	.....	.....	.....	.....	.....	.....
Cobb	24,664	22,286	20,748	18,814	14,242	18,843	7,589	.....	.....	.....	.....	.....
Coffee	16,169	10,483	5,070	8,192	2,879	.....	.....	.....	.....	.....	.....	.....
Colquitt	18,686	4,794	2,527	1,654	1,816	.....	.....	.....	.....	.....	.....	.....
Columbia	10,653	11,281	10,465	18,529	11,860	11,961	11,856	12,606	12,695	11,242	8,945	.....
Coweta	24,980	22,354	21,109	15,875	14,703	13,685	10,984	5,008	.....	.....	.....	.....
Crawford	10,868	9,315	8,656	7,557	7,693	8,984	7,981	5,313	.....	.....	.....	.....
Dade	4,578	5,707	4,702	3,088	8,069	2,680	1,884	.....	.....	.....	.....	.....
Dawson	5,442	5,612	5,887	4,969	8,856	.....	.....	.....	.....	.....	.....	.....
Decatur	29,454	19,949	19,072	15,183	11,922	8,262	5,872	3,854	.....	.....	.....	.....
DeKalb	21,112	17,189	14,497	10,014	7,806	14,828	10,467	10,042	.....	.....	.....	.....
Dodge	18,975	11,452	5,858	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dooley	26,567	18,146	12,420	9,790	8,917	8,861	4,427	2,185	.....	.....	.....	.....
Dougherty	13,679	12,206	12,622	11,517	8,295	.....	.....	.....	.....	.....	.....	.....
Douglas	8,745	7,794	6,984	.....	.....	.....	.....	.....	.....	.....	.....	.....
Early	14,828	9,792	7,611	6,998	6,149	7,246	5,444	2,051	768	.....	.....	.....
Echols	3,209	3,079	2,553	1,978	1,491	.....	.....	.....	.....	.....	.....	.....
Effingham	8,384	5,599	5,979	4,214	4,755	3,864	8,075	2,924	8,018	2,586	2,072	2,424
Elbert	19,729	15,876	12,957	9,249	10,433	12,959	11,125	12,354	11,788	12,156	10,094	.....
Emanuel	21,279	14,708	9,759	6,184	5,081	4,577	8,129	2,673	2,928	.....	.....	.....
Fannin	11,214	8,724	7,245	5,429	5,139	.....	.....	.....	.....	.....	.....	.....
Fayette	10,114	8,728	8,605	8,221	7,047	8,709	6,191	5,504	.....	.....	.....	.....
Floyd	83,113	28,891	24,418	17,280	15,195	8,205	4,441	.....	.....	.....	.....	.....
Forsyth	11,550	11,155	10,559	7,983	7,749	8,850	5,619	.....	.....	.....	.....	.....
Franklin	17,700	14,670	11,453	7,893	7,893	11,518	9,836	10,107	9,040	10,815	6,859	1,041
Fulton	117,363	84,655	49,187	33,446	14,427	.....	.....	.....	.....	.....	.....	.....
Gilmer	10,198	9,074	8,386	6,644	6,724	8,440	2,536	.....	.....	.....	.....	.....
Glascock	4,516	8,720	8,577	2,786	2,487	.....	.....	.....	.....	.....	.....	.....
Glynn	14,317	13,420	6,497	5,876	8,889	4,938	5,302	4,567	3,418	8,417	1,874	413
Gordon	14,119	12,758	11,171	9,268	10,146	5,984	.....	.....	.....	.....	.....	.....
Greene	16,542	17,051	17,547	12,454	12,652	13,068	11,690	12,549	13,589	11,679	10,761	5,405
Gwinnett	25,585	19,899	19,531	12,431	12,940	11,257	10,804	18,289	4,559	.....	.....	.....
Habersham	13,604	11,578	8,718	6,822	5,966	9,895	7,961	10,671	8,145	.....	.....	.....
Hall	20,752	18,047	15,298	9,607	9,866	8,718	7,875	11,748	5,086	.....	.....	.....
Hancock	18,277	17,149	16,989	11,817	12,044	11,578	9,659	11,820	12,784	13,380	14,456	.....

TABLE 8.—POPULATION OF GEORGIA BY COUNTIES: 1790 TO 1900.—Continued.

COUNTIES.	1900	1890	1880	1870	1860	1850	1840	1830	1820	1810	1800	1790
Haralson	11,922	11,316	5,974	4,004	8,039	14,721	13,983	5,105	.....	.....	.....	.....
Harris	18,009	16,797	15,758	13,284	18,786	.....	.....	.....	.....	.....	.....	.....
Hart	14,492	13,887	9,094	6,783	6,187	.....	.....	.....	.....	.....	.....	.....
Heard	11,177	9,557	8,769	7,866	7,805	6,923	5,829	.....	.....	.....	.....	.....
Henry	18,602	16,220	14,193	10,102	10,702	14,726	11,756	10,566	.....	.....	.....	.....
Houston	22,641	21,613	22,414	20,406	15,611	16,450	9,711	7,369	.....	.....	.....	.....
Irwin	13,645	6,816	2,696	1,837	1,699	8,884	2,038	1,180	411	.....	.....	.....
Jackson	24,039	19,176	16,297	11,181	10,605	9,768	8,522	9,004	8,355	10,569	7,786	.....
Jasper	15,033	13,600	11,851	10,439	10,743	11,486	11,111	13,131	14,614	7,573	.....	.....
Jefferson	18,212	17,213	15,671	12,190	10,219	9,131	7,254	7,309	7,054	6,111	5,684	.....
Johnson	11,409	6,129	4,800	2,964	2,919	.....	.....	.....	.....	.....	.....	.....
Jones	13,358	12,709	11,613	9,436	9,107	10,224	10,065	18,345	16,570	8,597	.....	.....
Laurens	25,908	13,747	10,053	7,834	6,998	6,442	5,585	5,589	5,486	2,210	.....	.....
Lee	10,344	9,074	10,577	9,567	7,196	6,660	4,520	1,680	.....	.....	.....	.....
Liberty	13,093	12,887	10,649	7,688	8,367	7,926	7,241	7,233	6,695	6,228	5,313	5,355
Lincoln	7,156	6,146	6,412	5,413	5,466	5,998	5,895	6,145	6,458	4,555	4,766	.....
Lowndes	21,036	15,102	11,049	8,321	5,249	7,714	5,574	2,453	.....	.....	.....	.....
Lumpkin	7,433	6,867	6,526	5,161	4,626	8,955	5,671	.....	.....	.....	.....	.....
McDuffie	9,804	8,789	9,449	.....	.....	.....	.....	.....	.....	.....	.....	.....
McIntosh	6,537	6,470	6,241	4,491	5,546	6,027	5,360	4,998	5,129	3,739	2,660	.....
Macon	14,093	13,183	11,675	11,458	8,449	7,052	5,045	.....	.....	.....	.....	.....
Madison	13,224	11,024	7,978	5,227	5,933	5,703	4,510	4,646	8,785	.....	.....	.....
Marion	10,080	7,728	8,598	8,000	7,390	10,280	4,812	1,486	.....	.....	.....	.....
Meriwether	23,839	20,740	17,651	13,756	15,330	16,476	14,182	4,422	.....	.....	.....	.....
Miller	6,319	4,275	8,720	3,091	1,791	.....	.....	.....	.....	.....	.....	.....
Milton	6,763	6,208	6,261	4,284	4,602	.....	.....	.....	.....	.....	.....	.....
Mitchell	14,767	10,906	9,392	6,683	4,308	.....	.....	.....	.....	.....	.....	.....
Monroe	20,682	19,137	18,808	17,213	15,953	16,985	16,275	16,202	.....	.....	.....	.....
Montgomery	16,359	9,248	5,381	8,586	2,997	2,154	1,616	1,269	1,889	2,954	8,180	.....
Morgan	15,813	16,041	14,032	10,696	9,997	10,744	9,121	12,046	13,520	8,369	.....	.....

Murray.....	8,623	8,461	8,269	6,500	7,083	14,438	4,695	.....	.....	.....	.....	.....
Muscogee.....	29,836	27,761	19,322	16,668	16,584	18,578	11,699	8,508	.....	.....	.....	.....
Newton.....	16,734	14,810	18,623	14,615	14,320	13,296	11,623	11,155	.....	.....	.....	.....
Oconee.....	8,602	7,713	6,351	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oglethorpe.....	17,881	16,951	15,400	11,782	11,549	12,259	10,868	13,618	14,046	12,297	9,780	.....
Paulding.....	12,969	11,948	10,887	7,639	7,068	7,039	2,556	.....	.....	.....	.....	.....
Pickens.....	8,641	8,182	6,790	5,317	4,951	.....	.....	.....	.....	.....	.....	.....
Pieroe.....	8,100	6,379	4,538	2,778	1,978	.....	.....	.....	.....	.....	.....	.....
Pike.....	18,761	16,300	15,849	10,905	10,078	14,306	9,176	6,149	.....	.....	.....	.....
Polk.....	17,856	14,945	11,952	7,822	6,295	.....	.....	.....	.....	.....	.....	.....
Pulaski.....	18,489	16,559	14,058	11,940	8,744	6,627	5,889	4,906	5,283	2,093	.....	.....
Putnam.....	13,436	14,842	14,539	10,461	10,125	10,794	10,260	13,261	15,475	10,029	.....	.....
Quitman.....	4,701	4,471	4,892	4,150	3,499	.....	.....	.....	.....	.....	.....	.....
Rabun.....	6,285	5,606	4,634	3,256	3,271	2,448	1,912	2,176	524	.....	.....	.....
Randolph.....	16,847	15,267	13,341	10,561	9,571	12,868	8,276	2,191	.....	.....	.....	.....
Richmond.....	58,735	45,194	34,665	25,724	21,284	16,246	11,982	11,644	8,608	6,189	5,475	11,317
Rockdale.....	7,515	6,818	6,838	.....	.....	.....	.....	.....	.....	.....	.....	.....
Schley.....	5,499	5,443	5,802	5,129	4,633	.....	.....	.....	.....	.....	.....	.....
Screven.....	19,252	14,424	12,786	9,175	8,274	6,847	4,794	4,776	3,941	4,477	3,019	.....
Spalding.....	17,619	13,117	12,585	10,205	8,699	.....	.....	.....	.....	.....	.....	.....
Stewart.....	15,856	15,682	13,998	14,204	13,422	16,027	12,933	.....	.....	.....	.....	.....
Sumter.....	26,212	22,107	18,239	16,559	9,428	10,322	5,759	.....	.....	.....	.....	.....
Talbot.....	12,197	13,258	14,115	11,913	13,616	16,584	15,627	5,940	.....	.....	.....	.....
Taliaferro.....	7,912	7,291	7,034	4,796	4,583	5,146	5,190	4,934	.....	.....	.....	.....
Tattnall.....	20,419	10,253	6,983	4,860	4,352	3,227	2,724	2,040	2,644	2,206	.....	.....
Taylor.....	9,846	8,666	8,597	7,143	5,998	.....	.....	.....	.....	.....	.....	.....
Telfair.....	10,083	5,477	4,828	3,245	2,718	3,026	2,763	2,136	2,104	744	.....	.....
Terrell.....	19,023	14,503	10,451	9,053	6,232	.....	.....	.....	.....	.....	.....	.....
Thomas.....	31,076	26,154	20,597	14,523	10,766	10,103	6,766	8,299	.....	.....	.....	.....
Towns.....	4,748	4,064	3,261	2,780	2,459	.....	.....	.....	.....	.....	.....	.....
Troup.....	24,002	20,723	20,565	17,632	16,262	16,879	15,733	5,799	.....	.....	.....	.....
Twiggs.....	8,716	8,195	8,918	8,545	8,320	8,179	8,422	8,031	10,640	3,405	.....	.....
Union.....	8,481	7,749	6,431	5,267	4,413	7,234	3,152	.....	.....	.....	.....	.....
Upson.....	13,670	12,186	12,400	9,430	9,916	9,424	9,408	7,018	.....	.....	.....	.....
Walker.....	16,661	13,282	11,056	9,925	10,081	13,109	6,572	.....	.....	.....	.....	.....

TABLE 3.—POPULATION OF GEORGIA BY COUNTIES: 1790 TO 1900—Continued.

COUNTIES.	1900	1890	1980	1870	1860	1850	1840	1830	1820	1810	1800	1790
Walton.....	20,942	17,467	15,622	11,038	11,074	10,821	10,206	10,929	4,192	1,026	.....	.....
Ware.....	13,761	8,811	4,159	2,286	2,200	3,888	2,823	1,205	.....	.....	.....	.....
Warren.....	11,463	10,957	10,885	10,545	9,820	12,425	9,789	10,946	10,630	8,725	8,829	.....
Washington.....	28,227	25,237	21,984	15,842	12,698	11,766	10,565	9,820	10,627	9,940	10,800	4,552
Wayne.....	9,449	7,485	5,980	2,177	2,268	1,499	1,258	963	1,010	676	.....	.....
Webster.....	6,618	5,695	5,237	4,677	5,080	.....	.....	.....	.....	.....	.....	.....
White.....	5,912	6,151	5,841	4,606	3,315	.....	.....	.....	.....	.....	.....	.....
Whitfield.....	14,509	12,916	11,900	10,117	10,047	.....	.....	.....	.....	.....	.....	.....
Wilcox.....	11,097	7,980	3,109	2,439	2,115	.....	.....	.....	.....	.....	.....	.....
Wilkes.....	20,866	18,081	15,985	11,798	11,420	12,107	10,148	14,237	17,606	14,887	18,103	31,500
Wilkinson.....	11,440	10,781	12,061	9,383	9,376	8,296	6,942	6,513	6,992	2,154	.....	.....
Worth.....	18,664	10,048	5,892	3,778	2,763	.....	.....	.....	.....	.....	.....	.....

There have been no territorial changes in the counties of Georgia since 1890.

TABLE 4.—POPULATION OF ATLANTA, AUGUSTA AND SAVANNAH, 1800 TO 1900.

CENSUS YEARS.	ATLANTA.			AUGUSTA.			SAVANNAH.		
	Population.	INCREASE.		Population.	INCREASE.		Population.	INCREASE.	
		Number.	Per Cent.		Number.	Per Cent.		Number.	Per Cent.
1900	89,872	24,889	87.1	39,441	6,141	18.4	54,244	11,055	25.5
1890	65,538	28,124	75.1	33,900	11,409	52.1	43,189	12,480	40.6
1880	37,409	15,620	71.6	21,891	6,592	42.2	30,709	2,474	8.7
1870	21,789	12,285	123.0	15,888	3,896	23.1	28,235	5,943	26.6
1860	9,554	6,982	271.4	12,493			22,292	6,980	45.5
1850	2,572			(1)			15,812	4,098	36.5
1840				6,403			11,214	8,488	44.2
1830							7,776	253	3.3
1820							7,523	2,808	44.2
1810							5,215	49	0.9
1800							5,166		

1 Not separately returned in 1850; in 1852, according to a census taken by local authorities, it had a population of 11,753.

TABLE 5.—QUANTITY OF COTTON GINNED, AVERAGE WEIGHT OF BALE, AVERAGE COST PER BALE FOR GINNING AND BALING CROP OF 1898, BY COUNTIES.

GEORGIA.

COUNTIES.	Total gross weight in pounds.	Commer- cial bales.	Equiv- alent 500- pound bales.	UPLAND CROP.				SEA-ISLAND CROP.				
				Square Bales.		Round Bales.		Number of bales.	Average gross weight of bale (pounds).	Average cost per bale for ginning and baling.	Average gross weight of bale (pounds).	Average cost per bale for ginning and baling.
				Number	Average gross weight of bale (pounds).	Average cost per bale for ginning and baling	Number						Average gross weight of bale (pounds)	Average cost per bale for ginning and baling.
The State.....	615,529,844	1,298,844	1,231,060	1,220,117	482	\$1.26	18,916	256	\$0.90	57,812	894	\$3.59
Appling.....	1,580,225	4,046	8,160	288	480	1.17	.....	.....	.....	8,778	894	4.20
Baker.....	1,968,910	4,089	8,983	4,089	487	1.06	.....	.....	.....	.....	.....	.....
Baldwin.....	4,883,292	10,119	9,666	10,119	478	1.16	.....	.....	.....	.....	.....	.....
Banks.....	3,957,520	8,791	7,915	8,791	450	1.85	.....	.....	.....	.....	.....	.....
Bartow.....	6,270,025	12,802	12,540	12,802	490	1.47	.....	.....	.....	.....	.....	.....
Berrien.....	2,467,652	6,088	4,985	1,142	462	1.29	.....	.....	.....	4,944	892	3.07
Bibb.....	3,287,655	6,568	6,475	6,568	498	1.22	.....	.....	.....	.....	.....	.....
Brooks.....	4,120,280	8,781	8,241	6,398	499	1.32	.....	.....	.....	2,885	404	8.88
Bryan.....	196,375	479	393	227	421	1.67	.....	.....	.....	252	400	8.50
Bulloch.....	4,065,785	9,792	8,182	1,924	455	1.44	.....	.....	.....	7,868	406	8.10
Burke.....	22,184,595	46,152	44,269	48,327	498	1.30	2,650	270	75	175	400	2.46
Butts.....	7,184,280	14,415	14,369	14,415	498	1.10	.....	.....	.....	.....	.....	.....
Calhoun.....	4,656,000	9,472	9,812	9,472	492	.98	.....	.....	.....	.....	.....	.....
Campbell.....	4,595,825	9,614	9,192	9,614	478	1.36	.....	.....	.....	.....	.....	.....
Carroll.....	12,873,411	28,504	25,747	26,715	468	1.20	1,789	178	1.12	.....	.....	.....
Catoosa.....	840,170	810	680	810	420	1.46	.....	.....	.....	.....	.....	.....
Charlton.....	120,800	302	242	802	400	4.40
Chattahoochee	2,484,910	5,069	4,970	5,069	493	1.11

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TABLE 5.—QUANTITY OF COTTON GINNED, AVERAGE WEIGHT OF BALE, AVERAGE COST PER BALE FOR GINNING AND BALING CROP OF 1899, BY COUNTIES.

GEORGIA—Continued.

COUNTIES.	UPLAND CROP.				SEA-ISLAND CROP.										
	Total gross weight in pounds.	Commer- cial bales	Equiv- alent 500- pound bales.	Square Bales.		Round Bales		Number of bales	Average gross weight of bale (pounds).	Average cost per bale for ginning and baling.					
				Number	Average gross weight of bale (pounds).	Average cost per bale for ginning and baling.	Number				Average gross weight of bale (pounds).	Average cost per bale for ginning and baling.			
Habersham	638,750	1,435	1,278	1,435	445	1 27	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hall.....	4,188,761	9,586	8,378	9,586	437	1 40	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hancock.....	6,359,285	14,871	18,719	13,888	480	1 08	488	244	.....	.....	.....	.....	.....	.....	.....
Haralson.....	2,408,724	5,597	4,817	5,597	430	1 27	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harris	11,003,877	22,852	22,008	21,380	496	1 06	1,522	275	1 00	.....	.....	.....	.....	.....	.....
Hart.....	5,680,710	12,519	11,261	12,421	452	1 30	98	227	70	.....	.....	.....	.....	.....	.....
Heard	5,497,855	13,422	12,996	13,422	484	1 24	.....	.....	.....	.....	.....	.....	.....	.....	.....
Henry	9,704,287	20,056	19,408	19,856	487	1 12	200	220	1 00	.....	.....	.....	.....	.....	.....
Houston	10,363,636	20,782	20,727	20,782	499	1 09	.....	.....	.....	.....	.....	.....	.....	.....	.....
Irwin	1,332,700	2,929	2,665	1,891	485	1 59	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson	10,189,895	22,866	20,379	22,816	446	1 28	50	250	1 00	.....	.....	.....	.....	.....	.....
Jasper	7,694,275	15,320	15,189	15,320	496	1 14	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jefferson.....	9,943,510	21,182	19,887	21,182	469	1 06	.....	.....	.....	.....	.....	.....	.....	.....	.....
Johnson	4,007,800	8,336	8,016	8,336	481	1 08	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jones	5,582,540	11,130	11,165	11,130	508	1 21	.....	.....	.....	.....	.....	.....	.....	.....	.....
Laurens	10,649,145	22,080	21,298	21,880	490	1 22	700	250	65	.....	.....	.....	.....	.....	.....
Lee	4,097,295	8,654	8,185	8,654	478	1 24	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liberty	180,250	450	380	380	488	1 25	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lincoln	2,528,535	5,182	5,053	5,132	492	1 17	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowndes	3,061,200	7,691	6,162	114	444	1 44	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lumpkin	28,750	75	58	75	388	1 52	.....	.....	.....	.....	.....	.....
McDuffie... ..	8,839,186	8,685	7,678	6,901	494	1 15	.....	.....	.....	.....	.....	.....
Macon	8,880,808	16,713	16,761	16,713	501	1 12	.....	.....	.....	.....	.....	.....
Madison	5,129,455	11,443	10,259	11,443	448	1 32	.....	.....	.....	.....	.....	.....
Marion	4 667,825	9,681	9,386	9,681	482	1 34	.....	.....	.....	.....	.....	.....
Meriwether	11,200,300	22,452	22,401	22,452	499	1 08	.....	.....	.....	.....	.....	.....
Miller ..	1,041,250	2,075	2,083	2,025	504	1 59	.....	.....	.....	.....	.....	4 00
Milton ..	2,723,425	6,407	5,447	6,407	425	1 41	.....	.....	.....	.....	.....	.....
Mitchell ..	4,759,940	10,049	9,520	7,863	494	1 28	.....	.....	.....	.....	.....	3 33
Monroe	9,178,760	18,724	18,348	18,724	490	1 15	.....	.....	.....	.....	.....	.....
Montgomery ..	2,445,955	5,892	4,892	4,858	462	1 33	.....	.....	.....	.....	.....	4 00
Morgan	7,818,370	16,458	15 637	15,220	494	1 14	.....	.....	.....	.....	.....	.....
Murray	1,173,245	2,586	2,346	2,586	454	1 48	.....	.....	.....	.....	.....	.....
Muscogee ..	8,494,475	7,042	6,989	7,042	496	1 24	.....	.....	.....	.....	.....	.....
Newton	7,018,700	14,878	14,087	14,848	489	1 26	.....	.....	.....	.....	.....	.....
Oconee	8,496,200	7,349	6,992	7,349	476	1 09	.....	.....	.....	.....	.....	.....
Oglethorpe ..	8,929,440	19,276	17,859	19,256	468	1 07	.....	.....	.....	.....	.....	.....
Paulding.	4,090,440	9,154	8,181	9,154	447	1 44	.....	.....	.....	.....	.....	.....
Pickens ..	817,020	1,851	1,684	1,851	441	1 47	.....	.....	.....	.....	.....	.....
Pierce	1,298,975	8,657	2,598	.....	.....	.....	.....	.....	.....	.....	.....	4 12
Pike	7,105,340	14,281	14,211	14,268	498	1 07	.....	.....	.....	.....	.....	.....
Polk ..	4,081,265	8,852	8,163	8,852	461	1 56	.....	.....	.....	.....	.....	.....
Pulaski	7,906,450	16,431	15,818	15,134	501	1 08	.....	.....	.....	.....	.....	.....
Putnam	4,692,239	9,609	9,384	9,609	488	1 18	.....	.....	.....	.....	.....	.....
Quitman	3,091,920	6,243	6,184	6,243	495	1 04	.....	.....	.....	.....	.....	.....
Randolph	9,165,250	18,558	18,330	18,558	494	1 09	.....	.....	.....	.....	.....	.....
Richmond ..	1,867,115	8,764	8,784	8,764	495	1 28	.....	.....	.....	.....	.....	.....
Rockdale ..	8,619,675	7,868	7,239	7,868	491	1 30	.....	.....	.....	.....	.....	.....
Schley ..	2,841,625	5,760	5,688	5,760	498	1 26	.....	.....	.....	.....	.....	.....
Screven	8,442,248	17,963	16,884	17,666	471	1 30	.....	.....	.....	.....	.....	8 79
Spalding	5,682,610	11,890	11,365	11,390	499	1 08	.....	.....	.....	.....	.....	.....
Stewart ...	8,848,587	17,875	17,687	17,875	495	1 28	.....	.....	.....	.....	.....	.....
Sumter	12,475,007	25,164	24,890	25, 64	495	1 20	.....	.....	.....	.....	.....	.....
Talbot	4,233,583	8,893	8,467	8,893	476	1 24	.....	.....	.....	.....	.....	.....

TABLE 5.—QUANTITY OF COTTON GINNED. AVERAGE WEIGHT OF BALE, AVERAGE COST PER BALE FOR GINNING AND BALING CROP OF 1899, BY COUNTIES.

GEORGIA—Continued.

COUNTIES.	Total gross weight in pounds.	Commer. class bales.	Equivalent 500-pound bales.	UPLAND CROP.				SEA-ISLAND CROP.		
				Square Bales.		Round Bales.		Number of bales.	Average gross weight of bale (pounds).	Average cost per bale for ginning and baling.
				Number	Average gross weight of bale (pounds).	Average cost per bale for ginning and baling.	Number	Average gross weight of bale (pounds).		
Taliaferro	3,088,250	6,487	6,176	6,020	485	1 00	467	229	1 00	.....
Tattnall.....	2,980,433	7,309	5,960	952	445	1 37	.....	.....	.....	8 20
Taylor	4,154,433	8,371	8,309	8,371	490	1 40	.....	.....	.....	.....
Telfair	1,216,875	2,541	2,434	2,324	483	1 43	.....	.....	.....	3 75
Terrell	12,792,500	25,719	25,585	25,719	497	1 04	.....	.....	.....	.....
Thomas	5,810,135	12,473	11,620	10,923	479	1 23	.....	.....	.....	8 28
Troup.....	10,716,741	21,550	21,433	21,515	498	1 06	85	147	1 00	.....
Twiggs.....	4,574,259	9,484	9,149	9,484	482	1 27	.....	.....	.....	.....
Upson.. ..	4,830,625	9,765	9,661	9,765	495	1 16	.....	.....	.....	.....
Walker	1,633,815	3,631	3,267	3,631	450	1 42	.....	.....	.....	.....
Walton	9,528,445	19,665	19,053	19,665	484	1 20	.....	.....	.....	.....
Ware	45,450	128	91	.....	.....	.....	.....	.....	.....	8 75
Warren	4,669,192	9,859	9,338	9,007	500	1 14	652	250	75	.....
Washington.....	14,321,796	29,544	28,644	29,194	488	1 14	350	250	1 25	.....
Wayne.	396,500	965	793	110	495	1 25	.....	.....	.....	4 00
Webster	2,000,250	4,116	4,001	4,116	486	1 15	.....	.....	.....	.....
White	60,000	150	120	150	400	1 65	.....	.....	.....	.....
Whitfield	858,375	1,947	1,717	1,947	441	1 56	.....	.....	.....	.....
Wilcox.....	1,850,085	3,885	3,900	3,820	504	1 34	.....	.....	.....	8 00
Wilkes.....	7,753,460	17,405	15,507	14,840	483	1 11	2,565	230	63	.....
Wilkinson ..	5,809,468	11,037	10,619	11,037	481	1 16	.....	.....	.....	.....
Worth	5,043,850	10,485	10,088	9,296	492	1 18	.....	.....	.....	8 60

TEXTILE MILLS IN GEORGIA.

Those not designated as woolen, knitting, carding or rug, are cotton mills.

Aberdeen Mills, Poulan, Ga. (projected), J. H. Bromley, President.

Almand & Dyson Knitting Mill, Washington, Ga., D. Hall, Superintendent.

*Anchor Duck Mills, Rome, Ga.

Annestown Cotton Mills, Stone Mountain, Ga., C. J. Haden, President.

Aragon Mills, Aragon, Ga., W. S. Walcott, President; J. P. Campbell and F. C. Walcott, Managers.

Athens Manufacturing Co., Athens, Ga. (cotton and wool), W. S. Dootson, Superintendent; J. H. Dootson, Agent.

Atlanta Cotton Mills, Atlanta, Ga., R. B. Smith (N. Y.), President; H. E. Fisher, Agent.

Atlanta Hosiery Mills, Atlanta, Ga., S. A. Magill, Proprietor.

Atlanta Knitting Mills, Atlanta, Ga., Jerome Silvey, President.

Atlanta Rug Mills, Atlanta, Ga.

Atlanta Woolen Mills, Atlanta, Ga., W. M. Nixon, President and Manager.

Atlantic & Gulf Mills, Quitman, Ga., J. F. Spain, President; J. W. Spain, Superintendent.

Augusta Factory, Augusta, Ga., Stewart Phinizy, President; A. S. Morris, Secretary and Treasurer.

Baldwin Cotton Mills, Baldwin, Ga. (projected), W. A. Shore, President.

Barnesville Manufacturing Company, Barnesville, Ga., J. W. Rogers, President; J. W. Hanson, Agent.

Battle Manufacturing Company (knitting), Warrenton, Ga., J. F. Allen, President; W. F. Wilhoit, Secretary.

Bibb Manufacturing Company, Columbus, Ga., J. F. Hanson, President; J. R. White, Secretary.

Bibb Manufacturing Company, Porterdale, near Covington, Ga., J. F. Hanson, President; O. S. Porter, Agent; John A. Porter, Superintendent.

Bibb Manufacturing Company, Macon, Ga., J. F. Hanson, President; J. R. White, Secretary.

Bibb Manufacturing Company, Pottersville, Ga., J. F. Hanson, President; J. R. White, Secretary.

Bowen, Jewell & Company's Mill, Jewells, Ga., Bowen, Jewell & Co.

Brooks Underwear Manufacturing Company (knitting), Molena, Ga.

Bulloch County Cotton Mill, Statesboro, Ga., F. B. Green, President (not running).

*Canton Cotton Mills, Canton, Ga., R. T. Jones, President; W. T. Brown, Superintendent.

Capps Cotton Mill, Toccoa, Ga., T. A. Capps, President.

* New Mills.

*Carlton Manufacturing Company, Carlton, Ga.

Cedartown Cotton Mills, Cedartown, Ga., Daniel Baugh (Phila.), President; J. H. Hines, Manager.

Clegg Manufacturing Company, Columbus, Ga., J. F. Clegg, Treasurer (not in operation).

*Cochran Cotton Mills Company, Cochran, Ga., J. J. Taylor, President; D. E. Duggan, Superintendent.

Columbus Manufacturing Company, Columbus, Ga., F. B. Gordon, President; Charles H. Gordon, Superintendent.

Columbus Wadding Mills, Columbus, Ga., E. P. Dismukes, President.

Community Cotton Mills, Geneva, Ga. (projected).

Concord Woolen Mill, Nicajack, Ga., J. W. Rice, Manager; T. S. Hudlow, Superintendent.

*Cordele Cotton Mills Company, Cordele, Ga., J. T. Westbrook, President; R. L. Wilson, Agent.

Cornelia Cotton Mills, Cornelia, Ga. (projected).

Covington Cotton Mills, Covington, Ga., T. C. Swann, President; W. C. Clark, Secretary and Treasurer.

Crown Cotton Mills, Dalton, Ga., George W. Hamilton, President; J. W. Brown, Superintendent.

Dixie Cotton Mills, LaGrange, Ga., O. A. Dunson, President and Manager.

*Dublin Cotton Mills, Dublin, Ga., Wm. Pritchett, President; J. Wheeler Mears, Superintendent.

Eagle & Phoenix Manufacturing Company (cotton and wool), Columbus, Ga., G. Gunby Jordan, President; W. H. Rankin, Superintendent.

Eastman Cotton Mills, Eastman, Ga.

Eatonton Electric Company, Eatonton, Ga., J. W. Preston, President; A. S. Reid, Secretary.

Elizabeth Cotton Mills, six miles from Atlanta, Ga., F. I. Stone, President.

Enterprise Manufacturing Company, Augusta, Ga., J. P. Verdery, President; Otis G. Lynch, Superintendent.

Exchange Cotton Mill, Macon, Ga. (projected), J. W. Cabaniss, President; C. E. Hams, Superintendent.

Exposition Cotton Mills, Atlanta, Ga., J. D. Turner, President; G. P. Jeter, Superintendent.

Fincher Cotton Mill, Toonigh, Ga., E. A. Fincher, Proprietor.

Forsyth Manufacturing Company, Forsyth, Ga., J. M. Ponder, President; J. C. Kennett, Superintendent.

Fulton Bag & Cotton Mills, Atlanta, Ga., Jacob Elsas, President; J. R. Pearce, Superintendent.

Gainesville Cotton Mills, Gainesville, Ga.

Gate City Hosiery Mills (knitting), Atlanta, Ga., J. C. Greenfield, President.

Gate City Manufacturing Company (knitting), East Point, Ga., Samuel A. Carter, President.

* New Mills.

Georgia Manufacturing Company (cotton and knitting), Columbus, Ga., C. L. Perkins, President; J. W. Boyd, Superintendent.

Georgia Manufacturing Company, Gainesville, Ga., Dr. R. E. Green, President; R. E. Green, Jr., Secretary.

Georgia Manufacturing Company, Whitehall, Ga., J. R. White, President; Charles F. Smith, Superintendent.

Georgia Underwear Company (knitting mill), Barnesville, Ga., J. J. Rogers, President; Floyd M. Murphey, Superintendent.

Globe Cotton Mills, Augusta, Ga., J. A. A. W. Clark, President; J. C. F. Clarke, Superintendent.

Glover Manufacturing Company, Juliette, Ga., J. N. Birch, President; E. Duggan, Superintendent.

Grantville Hosiery Mills (knitting), Grantville, Ga., N. O. Banks, President; J. P. Brasche, Superintendent.

Griffin Knitting Mills, Griffin, Ga., Douglas Boyd, President.

Griffin Manufacturing Company, Griffin, Ga., W. J. Kincaid, President; Charles Wheeler, Superintendent.

*Gwinnett Cotton Mills, Lawrenceville, Ga., M. S. Cornett, President; J. H. Duggan, Secretary.

Hamburger Cotton Mills, Columbus, Ga., Louis Hamburger, President; Charles Hancock, Superintendent.

Hampton Cotton Mills, Hampton, Ga., A. J. Henderson, President; W. M. Harris, Secretary.

Hanson Crawley Company's Knitting Mill, Barnesville, Ga., J. L. Kennedy, President.

Harmony Mills, Alice, Ga., P. M. Tate, Proprietor; J. A. Winterbottom, Superintendent.

Harmony Grove Mills, Harmony Grove, Ga., L. G. Hardman, President; M. R. Chrystal, Superintendent.

Hawkinsville Cotton Mills, Hawkinsville, Ga., T. H. Grace, President.

Henderson Manufacturing Co. (knitting mill), Hampton, Ga., A. J. Henderson, President; A. D. Henderson, Manager.

High Shoals Manufacturing Company, High Shoals, Ga., J. W. Hinton, President; A. J. Baxter, Superintendent.

Hogansville Manufacturing Company, Hogansville, Ga., R. J. Griffin, President; G. W. Murphy, Manager.

Houston Factory, Dennard, Ga., Dennard & Hughes (not running).

Hutcheson Manufacturing Company, Banning, Ga., C. S. Reid, President; W. H. Thomas, Superintendent.

*Irwin Manufacturing Company, Fitzgerald, Ga., W. R. Bowen, President (projected).

Isaetta Mills, Augusta, Ga., James Brotherton, President; H. Ware, Superintendent.

Iverson and Sterne Manufacturing Company, Milner, Ga., Iverson & Sterne, Proprietors.

Jackson & Brother's Carding Mill, Lawrenceville, Ga., E. P. Jackson and Brother, Proprietors.

* New Mills.

*Jasper Cotton Mills, Monticello, Ga. (projected), L. O. Benton, President.

Jefferson Cotton Mills, Jefferson, Ga., H. W. Bell, President; J. C. Turner, Manager.

Jewells Mills, Jewells, Ga., George Bradley, Superintendent.

Josephine Mills (knitting), Cedartown, Ga., Daniel Baugh, President; L. D. Wade, Superintendent.

Kincaid Manufacturing Company, Griffin, Ga., W. J. Kincaid, President; Charles Wheeler, Superintendent.

King, J. P., Manufacturing Company, Augusta, Ga., Charles Estes, President; Joel Smith, Superintendent.

LaGrange Mills, LaGrange, Ga., J. M. Barnard, President; G. W. Carpenter, Superintendent.

Lanett Cotton Mills, West Point, Ga., L. Lanier, President; E. Lang, Superintendent.

Laurel Mills Manufacturing Company (woolen), Roswell, Ga., S. Crowley, President; W. R. McGregor, Superintendent.

*Lavonia Cotton Mills, Lavonia, Ga., M. Crawford, President.

Little River Mill, Waleska, Ga.

Louisville Cotton Mills, Louisville, Ga., W. W. Abbott, President.

Macon Knitting Company, Macon, Ga., D. H. Howes, Agent; Joseph Benner, Superintendent.

*McRae Cotton Mill Company, McRae, Ga. (projected).

Mallison Braided Cord Company, Athens, Ga., L. F. Edwards, President; W. A. Fowler, Superintendent.

Manchester Manufacturing Company, Macon, Ga., W. A. Crutchfield, President; J. D. Hough, General Manager.

Mandeville Cotton Mills, Carrollton, Ga., L. C. Mandeville, President; E. Montgomery, Superintendent.

Marietta Knitting Company, Marietta, Ga., R. H. Northcutt, President; J. H. Barnes, Superintendent.

Marietta Paper Manufacturing Company (cotton batting and waste, 32 cards), Marietta, Ga.

Mary Leila Cotton Mills, Greensboro, Ga., E. A. Copeland, President; S. T. Buchanan, Superintendent.

Massachusetts Mills in Georgia, Lindale, Ga., Augustus Lowell, President; Wm. Audley Marshall, Superintendent.

Middle Georgia Cotton Mills, Eatonton, Ga., B. W. Hunt, President; E. B. Ezell, Superintendent.

Millen Cotton Mills, Millen, Ga., J. H. Daniel, President; R. G. Daniel, Secretary and Treasurer.

Monroe Cotton Mills, Monroe, Ga., B. S. Walker, President; J. Wheeler Mears, Superintendent.

Moultrie Cotton Mills, Moultrie, Ga., W. C. Verreen, President; Z. H. Clark, Secretary.

Muscogee Manufacturing Company, Columbus, Ga., E. W. Swift, President; Jesse Paine, Superintendent.

* New Mills.

*New Century Cotton Mills, Douglasville, Ga., J. D. James, President; Samuel Hale, Superintendent (not running).

Newnan Cotton Mills, Newnan, Ga., R. D. Cole, Sr., President; John Florence, Superintendent.

Oxford Knitting Mills, Barnesville, Ga., J. C. Collier, President; S. H. Langham, Superintendent.

Pacolet Manufacturing Company, New Holland, near Gainesville, Ga.

Palmetto Cotton Mills, Palmetto, Ga., J. K. P. Carlton, President; W. S. Harbin, Superintendent.

Park Mills, LaGrange, Ga., L. M. Park & Sons, Proprietors; L. M. Park, President; Wm. Houston, Superintendent.

Park Woolen Mills, Rossville, Ga., W. A. Campbell, President; C. A. Taylor, Superintendent.

Paulding County Manufacturing Company, Dallas, Ga., E. Davis, President; R. P. Gann, Secretary.

Payne Cotton Mills, Macon, Ga., W. S. Payne, President; J. H. Kane, Superintendent.

Pearle Cotton Mills, Elberton, Ga., T. M. Swift, President; R. A. Field, Superintendent.

Pelham Manufacturing Company, Pelham, Ga., J. L. Hand, President; B. W. Curry, Treasurer.

Penfield Hosiery Mill (knitting), Penfield, Ga., T. W. Woodham, Superintendent.

Pepperton Cotton Mills, Jackson, Ga., J. R. Wright, President; J. L. Asbel, Superintendent.

Phoenix Cotton Factory, ten miles from Augusta, Ga., M. B. Hatcher, President; W. W. Hack, Superintendent.

Piedmont Cotton Mills, Atlanta, Ga., B. L. Willingham, President; Baynard Willingham, Superintendent.

Porterdale Mills, Covington, Ga., O. S. Porter, Agent.

Porter Manufacturing Company (cotton and wool), Bert, Ga., T. L. Langston, President; S. Crowley, General Manager.

Princeton Manufacturing Company, Athens, Ga., James White, Proprietor; W. W. Duncan, Superintendent.

Quintette Manufacturing Company, Eatonton, Ga., Robert A. Reid, President; E. M. Brown, Treasurer.

Raccoon Manufacturing Company, Raccoon Mills, Ga., John S. Cleg-horn, President; R. S. White, Superintendent.

Richmond Hosiery Mills (knitting), Rossville, Ga., E. G. Richmond, President; Garnett Andrews, Jr., Manager.

Riverdale Cotton Mills, West Point, Ga., James Pierce, President; Wm. Brown, Superintendent.

Riverside Cotton Mills, Augusta, Ga., George K. Stearns, President; John Vivian, Superintendent.

Riverside Mills, Marietta, Ga. (branch of the Augusta Mill of same name).

* New Mills.

Rome Cotton Factory, Rome, Ga., Henry Harvey, President; C. E. McLin, Superintendent.

Roswell Manufacturing Company, Roswell, Ga., S. Y. Stribling, President.

Rushton Cotton Mills, Griffin, Ga., B. R. Blakely, President; George H. Peckham, Superintendent.

Russell Manufacturing Company, Winder, Ga.

Savannah Cotton Mills, Savannah, Ga., Walter N. Brown, Superintendent.

Schofield Manufacturing Company (knitting), Macon, Ga., T. O. Schofield, President; W. P. McQuillin, Superintendent.

Scottdale Mills, near Atlanta, Ga., George W. Scott, President; C. M. Candler, Treasurer.

Shoal Creek Cotton Mills, Shoal Creek, Ga., J. M. Edwards, Proprietor; A. B. Edwards, Superintendent.

Sibley Manufacturing Company, Augusta, Ga., John W. Chafee, President; James C. Platt, Superintendent.

Smith Manufacturing Company, Thomson, Ga., John E. Smith, President; Mr. Fielding, Superintendent.

Social Circle Cotton Mills, Social Circle, Ga., J. B. Robinson, President.

Soque Mills (cotton and wool), Bert, 8 miles from Cornelia, Ga., T. L. Langston, President; F. W. Earnshaw, Superintendent.

Southern Shoddy Mills, Rossville, Ga., G. A. Rinker, Manager; H. Sheard, Superintendent.

Spalding Cotton Mills, Griffin, Ga., W. J. Kincaid, President; Allen Little, Superintendent.

Sparta Cotton Mills, Sparta, Ga., D. P. Ferguson, Proprietor (not running).

Standard Cotton Mills, Cedartown, Ga., M. O. Berry, President; Wm. Parker, Manager.

Standard Manufacturing Company (knitting mill), Athens, Ga., Wm. and J. H. Dootson and A. H. Hodgson, Proprietors.

Star Thread Mills, Barnett Shoals, 10 Miles from Athens, Ga., J. W. Morton, Agent; J. C. Bone, Superintendent.

Strickland Cotton Mills, Valdosta, Ga., B. F. Strickland, President; E. W. Lane, Secretary.

*Strickland Mills, Concord, Ga., G. W. Strickland, Proprietor (Incorporated, 1900, but not yet running).

Sutherland Manufacturing Company, Augusta, Ga., Wm. T. Davidson, President; John M. Head, Superintendent.

Swift's Cotton Mills, Elberton, Ga., T. M. Swift, President; R. A. Field, Superintendent.

Swift Manufacturing Company, Columbus, Ga., Louis Hamburger, President; John T. Abney, Superintendent.

Taylor Manufacturing Company, 4 miles from Reynolds, Ga., Bibb

Manufacturing Company of Macon, Ga., Proprietors; W. R. Rodgers, Superintendent.

*Tennille Cotton Mills, Tennille, Ga., J. W. Smith, President; J. Boshinski, Secretary.

Thomaston Cotton Mills, Thomaston, Ga., R. A. Matthews, President; O. S. Causey, Superintendent.

*Tifton Cotton Mills, Tifton, Ga., H. H. Tift, President; L. G. Manard, Secretary.

Tillman Manufacturing Company (knitting mills), Valdosta, Ga. (Incorporated 1900; mill not yet built).

Toccoa Cotton Mills, Toccoa, Ga., W. R. Bruce, Treasurer and Manager; J. W. Goodroe, Superintendent.

Trio Manufacturing Company, Forsyth, Ga., R. P. Brooks, President; C. A. Ensign, Secretary.

Trion Manufacturing Company, Trion, Ga., A. S. Hamilton, President; Z. T. McKinney, Superintendent.

Union Cotton Mills, LaFayette, Ga., A. R. Steele, President and Manager; John R. Steele, Superintendent.

Union Manufacturing Company (knitting mill), Union Point, Ga., Harold Lamb, President; H. S. Lovern, Secretary.

*Unity Cotton Mills, LaGrange, Ga. (incorporated 1900, not complete).

Upton Knitting Mills, Steed, Ga., T. S. Yates, President.

Valdosta Cotton Manufacturing Company, Valdosta, Ga. (projected).

Wahneta Mills (knitting), Cedartown, Ga., E. S. Mumford, President; G. H. Wade, Secretary and Treasurer.

Wahoo Manufacturing Company, Sargents, Ga., H. C. Arnall, President; J. A. Smith, Superintendent.

Walton Cotton Mill Company, Monroe, Ga. (projected), C. T. Mobley, President; J. Wheeler Mears, Superintendent.

Warwick Cotton Mills, Augusta, Ga., Frank R. Clark, President; W. B. Kitchings, Superintendent.

Waynman Cotton Mills, Waynmanville, Ga., T. M. Matthews, President; C. H. Robertson, Manager.

West Point Manufacturing Company, West Point, Ga., L. Lanier, President; T. Lang, Superintendent.

Weatherly and Lambdin Wool Carding Mill, Red Clay, Ga.

Whitehall Yarn Mill, Whitehall, Ga., John R. White, Proprietor.

Whittier Cotton Mills, Chattahoochee, Ga., Helen A. Whittier, President; W. R. B. Whittier, Agent; Henry W. Salmon, Superintendent.

Wilkes Cotton Mill Company, Washington, Ga., chartered 1900, incomplete.

Willingham Cotton Mills, Macon, Ga., C. B. Willingham, President; G. T. Kennett, Superintendent.

Winder Cotton Mills, Winder, Ga., W. B. Cants, President; R. L. Rogers, Secretary and Treasurer.

* New Mills.

Winn Wool Carding Mill, Bowman, Ga., D. J. Winn & Co., Proprietors.

Witham Cotton Mills, Hartwell, Ga., W. S. Witham, President; H. L. Witham, Superintendent.

Woodside Cotton Mills, Gainesville, Ga. (projected), J. D. Woodside, President.

Woodstock Cotton Mills, Toonigh, Ga., E. A. Fincher, Proprietor.

FERTILIZER FACTORIES IN GEORGIA.

Abbott & Stone	Louisville,	Georgia.
Adair, A. D. & McCarty Bros.....	Atlanta,	Georgia.
Alford, D. C. & Co.	Hartwell,	Georgia.
American Fertilizer Co.	Macon,	Georgia.
Andrew, Glenn & Co.	Carlton,	Georgia.
Arlington Oil and Fertilizer Co.	Arlington,	Georgia.
Armour Fertilizer Co.	Atlanta,	Georgia.
Arnold & Co.	Elberton,	Georgia.
Arnold & Reynolds	Washington,	Georgia.
Askew, J. F.	Hogansville,	Georgia.
Augusta Guano Co.	Augusta,	Georgia.
Baker, D. A.	Royston,	Georgia.
Bale, F. S.	Rome,	Georgia.
Blackshear Manufacturing Co.	Blackshear,	Georgia.
Blanchard & Humber	Columbus,	Georgia.
Bowker Fertilizer Co.	Savannah,	Georgia.
Brooks & Tabor	Lavonia,	Georgia.
Brown Brothers	Elberton,	Georgia.
Busha, S. J.	Buford,	Georgia.
Butler, Heath & Butler	Camilla,	Georgia.
Cannon, J. W.	Lavonia,	Georgia.
Cooper, W. W.	Flowery Branch,	Georgia.
Coweta Fertilizer Co.	Newnan,	Georgia.
Daniel Sons & Palmer Co.....	Millen,	Georgia.
Davis Fertilizer Co.	Quitman,	Georgia.
Ellis, Charles	Savannah,	Georgia.
Excelsior Manufacturing Co.	Washington,	Georgia.
Farmers Cotton Oil & Manufacturing Co.	Locust Grove,	Georgia.
Fort Gaines Oil & Guano Co.	Fort Gaines,	Georgia.
Fowler Bros. & Co.	Marietta,	Georgia.
Furman Farm & Improvement Co.	Atlanta,	Georgia.
Georgia Chemical Works	Augusta,	Georgia.
Georgia Farmers' Oil & Fertilizer Co.	Madison,	Georgia.
Gibbs, L. Y. Sons & Co.	Savannah,	Georgia.
Grovania Oil & Fertilizer Co.	Grovania,	Georgia.
Hand Trading Co.	Pelham,	Georgia.
Harper & Hewell	Dewy Rose,	Georgia.
Hays, A. N.	Covington,	Georgia.
Hodgson Fertilizer Co.	Athens,	Georgia.

Hogansville Fertilizer Co.	Hogansville,	Georgia.
Home Mixture Guano Co.	Columbus,	Georgia.
Jackson Fertilizer Co.	Jackson,	Georgia.
Jefferson Manufacturing Co.	Jefferson,	Georgia.
Jones, W. O. & Co.	Elberton,	Georgia.
Kennesaw Guano Co.	Atlanta,	Georgia.
Kramer, Mandeville & Co.	Carrollton,	Georgia.
Lowe, T. J.	Mabelton,	Georgia.
McBride, Robert & Co.	Newnan,	Georgia.
McBurney Oil & Fertilizer Co.	Warrenton,	Georgia.
McCaw Manufacturing Co.	Macon,	Georgia.
McKenzie Oil & Fertilizer Co.	Atlanta,	Georgia.
Mallet & Nutt	Jackson,	Georgia.
Manning, W. J.	Powder Springs,	Georgia.
Marietta Guano Co.	Atlanta,	Georgia.
Maynard, P. B. & Co.	Forsyth,	Georgia.
Middle Georgia Oil & Fertilizer Co.	Hogansville,	Georgia.
Mitchell County Fertilizer Co.	Camilla,	Georgia.
Monroe Guano Co.	Monroe,	Georgia.
Napier Bros.	Macon,	Georgia.
Neely, R. C. C.	Waynesboro,	Georgia.
Old Dominion Guano Co.	Atlanta,	Georgia.
Peeples & Lane	Valdosta,	Georgia.
Pioneer Guano Co.	Albany,	Georgia.
Pittard, John T.	Winterville,	Georgia.
Putney Fertilizer Co.	Putney,	Georgia.
Ramspeek, G. A.	Decatur,	Georgia.
Richland Guano Co.	Richland,	Georgia.
Savannah Guano Co.	Savannah,	Georgia.
Skinner, C. W.	Waynesboro,	Georgia.
Smith, J. M.	Smithonia,	Georgia.
Smith, T. N. & J. W.	Tennille,	Georgia.
Stevens, Martin & Co.	Carlton,	Georgia.
Strickland, A. J. Manufacturing Works	Valdosta,	Georgia.
Suwannee Fertilizer Co.	Savannah,	Georgia.
Swift Fertilizer Works	Atlanta,	Georgia.
Tabor & Almond	Elberton,	Georgia.
Thomas, N. P.	Waynesboro,	Georgia.
Turnipseed, J. W. & Sons	Hampton,	Georgia.
Union Fertilizer Co.	Atlanta,	Georgia.
Valdosta Guano Co.	Valdosta,	Georgia.
Virginia-Carolina Chemical Co.	Atlanta,	Georgia.
Walker Bros.	Griffin,	Georgia.
Wilcox, Ives & Co.	Savannah,	Georgia.
Wilkins & Jones	Waynesboro,	Georgia.
Willingham, C. B.	Macon,	Georgia.
Worth County Fertilizer & Manufacturing Co.	Sylvester,	Georgia.
Wright, Carter & Co.	Jackson,	Georgia.

GEORGIA BANKS.

TOWN	COUNTY	NAME OF BANK	WHEN ESTABLISHED
Abbeville	Wilcox	Citizens' Bank <i>a</i>	1900
Acworth	Cobb	S. Lemon Banking Co. <i>b</i>	1853
Adairsville	Bartow	Bank of Adairsville <i>a</i>	1899
Adel	Berrien	Bank of Adel <i>a</i>	1899
Albany	Dougherty	Albany National Bank	1895
"	"	Commercial Bank of Albany <i>a</i>	1888
"	"	Exchange Bank of Albany <i>a</i>	1893
"	"	First National Bank	1888
Americus	Sumter	Bank of Commerce <i>a</i>	1891
"	"	Bank of Southwestern Georgia <i>a</i>	1887
"	"	People's Bank <i>a</i>	1899
"	"	Planters' Bank <i>a</i>	1892
Arlington	Calhoun	Bank of Arlington <i>a</i>	1899
Ashburn	Worth	Ashburn Bank <i>a</i>	1900
Athens	Clarke	Athens Savings Bank <i>a</i>	1887
"	"	Bank of the University <i>a</i>	1873
"	"	National Bank of Athens	1866
Atlanta	Fulton	Atlanta National Bank	1865
"	"	Bank of Commerce <i>a</i>	1899
"	"	Capital City National Bank	1900
"	"	Coker Banking Company <i>b</i>	1873
"	"	Fourth National Bank	1896
"	"	James' Bank <i>b</i>	1860
"	"	Lowry National Bank	1861
"	"	Maddox-Rucker Banking Co.	1880
"	"	Neal Loan & Banking Co. <i>a</i>	1887
"	"	Third National Bank	1896
"	"	Atlanta Banking & Savings Co. <i>a</i>	1886
"	"	Atlanta Savings Bank <i>a</i>	1890
"	"	Capital City Trust Co. <i>a</i>	1900
"	"	Farmers' and Traders' Bank	1900
"	"	Georgia Savings Bank & Trust Co. <i>a</i>	1899
"	"	Germania Loan & Banking Co. <i>a</i>	1887
"	"	Southern Banking & Trust Co. <i>a</i>	1889
"	"	Trust Company of Georgia <i>a</i>	1890
"	"	Darwin G. Jones <i>b</i>	1881
"	"	George S. May <i>b</i>	1867
"	"	Weyman & Connors, Bankers <i>b</i>	1891
Augusta	Richmond	Augusta Savings Bank <i>a</i>	1879
"	"	Commercial Bank <i>a</i>	1863
"	"	Georgia Railroad Bank <i>a</i>	
"	"	National Bank of Augusta	1865
"	"	National Exchange Bank	1871
"	"	Planters' Loan & Savings Bank <i>a</i>	1870
"	"	Union Savings Bank <i>a</i>	1892
Bainbridge	Decatur	Bainbridge State Bank <i>a</i>	1891
"	"	Peoples' Bank <i>a</i>	1900
Barnesville	Pike	Barnesville Savings Bank <i>a</i>	1873
"	"	New South Savings Bank <i>a</i>	1891
Baxley	Appling	Baxley Banking Co. <i>b</i>	1897
Blackshear	Pierce	Blackshear Bank <i>a</i>	1892
Blakely	Early	Bank of Blakely <i>a</i>	1893
Blue Ridge	Fannin	Blue Ridge Bank <i>b</i>	1900
Boston	Thomas	M. R. Mallette <i>b</i>	1889
Brunswick	Glynn	Brunswick Bank & Trust Co. <i>a</i>	1890
"	"	National Bank of Brunswick	1894
Buena Vista	Marion	Buena Vista Loan & Savings Bank <i>a</i>	1889
Buford	Gwinnett	Bank of Buford <i>a</i>	1893
Butler	Taylor	Bank of Butler <i>b</i>	1900
Cairo	Thomas	Cairo Banking Co. <i>b</i>	1900
Calhoun	Gordon	Bank of Calhoun <i>a</i>	1891
Camilla	Mitchell	Bank of Camilla <i>a</i>	1890

a State. *b* Private.

TOWN	COUNTY	NAME OF BANK	WHEN ESTABLISHED
Canton	Cherokee	Bank of Canton <i>a</i>	1892
Carrollton	Carroll	Carrollton Bank <i>a</i>	1891
"	"	First National Bank	1900
Cartersville	Bartow	Bank of Cartersville <i>a</i>	1895
"	"	First National Bank	1889
Cedartown	Polk	Commercial Bank <i>a</i>	1889
Chipley	Harris	Bank of Chipley <i>a</i>	1899
Cochran	Pulaski	Cochran Banking Co. <i>b</i>	1892
Columbus	Muscogee	Columbus Savings Bank <i>a</i>	1888
"	"	Fourth National Bank	1891
"	"	Merchants' and Mechanics' Bank <i>a</i>	1872
"	"	National Bank of Columbus	1876
"	"	Third National Bank	1888
Comer	Madison	Comer Bank <i>a</i>	1900
Conyers	Rockdale	John H. Almand <i>b</i>	1892
Cordele	Dooly	Bank of Wight & Weslosky Co. <i>b</i>	1888
"	"	Citizens' Bank <i>a</i>	1899
"	"	Peoples' Bank <i>a</i>	1898
Cornelia	Habersham	Cornelia Bank <i>a</i>	1900
Covington	Newton	Clark Banking Co. <i>a</i>	1891
Crawfordville	Taliaferro	Bank of Crawfordville <i>a</i>	1898
Culloden	Monroe	Bank of Culloden <i>a</i>	1897
Cuthbert	Randolph	Bank of Cuthbert	1890
Dallas	Paulding	Bank of Dallas	1899
Dalton	Whitfield	First National Bank	1888
"	"	O. L. Hardwick & Co. <i>b</i>	1873
Darien	McIntosh	Darien Bank <i>a</i>	1889
Dawson	Terrell	Dawson National Bank	1889
"	"	First State Bank <i>a</i>	1887
Demorest	Habersham	Savings Bank of Demorest <i>b</i>	1898
Douglas	Coffee	Union Banking Co. <i>a</i>	1899
Douglasville	Douglas	Douglasville Banking Co. <i>a</i>	1891
Dublin	Laurens	Dublin Banking Co. <i>a</i>	1892
"	"	Laurens Banking Co. <i>a</i>	1898
Eastman	Dodge	Citizens' Banking Co. <i>a</i>	1891
"	"	Merchants' & Farmers' Bank <i>b</i>	1896
Eatonton	Putnam	Middle Georgia Bank <i>a</i>	1891
"	"	Putnam County Banking Co. <i>a</i>	1891
Elberton	Elbert	Bank of Elberton <i>a</i>	1893
"	"	Elberton Loan & Savings Bank <i>a</i>	1888
Ellaville	Schley	Ellaville Agency Bank of Southwestern Georgia <i>b</i>	1897
Fairburn	Campbell	W. T. Roberts <i>b</i>	1899
Fayetteville	Fayette	Bank of Fayetteville <i>b</i>	1898
Fitzgerald	Irwin	Merchants' & Planters' Bank <i>a</i>	1900
Flovilla	Butts	W. B. Dozier <i>b</i>	1895
Forsyth	Monroe	Bank of Forsyth <i>a</i>	1895
"	"	W. H. Head Banking Co. <i>b</i>	1874
"	"	W. T. Maynard & Co. <i>b</i>	1887
Fort Gaines	Clay	Bank of Fort Gaines <i>a</i>	1890
Fort Valley	Houston	Dow Law Bank <i>a</i>	1895
"	"	Exchange Bank <i>a</i>	1889
Gainesville	Hall	First National Bank	1889
"	"	State Banking Co. <i>a</i>	1889
"	"	J. H. Hunt <i>b</i>	1893
Greensboro	Greene	Armor Brothers <i>b</i>	1898
"	"	E. A. Copelan <i>b</i>	1889
Greenville	Meriwether	Greenville Banking Co. <i>a</i>	1891
Griffin	Spalding	City National Bank	1873
"	"	Griffin Banking Co. <i>a</i>	1870
"	"	Merchants' & Planters' Bank	1889
"	"	Savings Bank of Griffin	1889
Harmony			
Grove	Jackson	Northeastern Banking Co. <i>a</i>	1892
Hartwell	Hart	Farmers' & Merchants Bank <i>a</i>	1899

a State. *b* Private.

TOWN	COUNTY	NAME OF BANK	WHEN ESTABLISHED
Hartwell	Hart	Hartwell Bank <i>a</i>	1899
Hawkinsville	Pulaski	Hawkinsville Bank & Trust Co. <i>a</i>	1872
"	"	Planters' Bank <i>a</i>	1896
Hazlehurst	Appling	J. G. Pace <i>b</i>	1897
Hogansville	Troup	Merchants' & Farmers' Bank <i>a</i>	1889
Jackson	Butts	Jackson Banking Co. <i>a</i>	1888
Jefferson	Jackson	Jefferson Banking Co. <i>a</i>	1892
Jesup	Wayne	Merchants' & Farmers' Savings Bank <i>b</i>	1891
LaFayette	Walker	Bank of LaFayette <i>a</i>	1899
LaGrange	Troup	Bank of LaGrange <i>a</i>	1890
"	"	La Grange Banking & Trust Co. <i>a</i>	1871
Lavonia	Franklin	Bank of Lavonia <i>a</i>	1898
Lawrenceville	Gwinnett	Bank of Lawrenceville <i>a</i>	1895
Lexington	Oglethorpe	Bank of Lexington <i>b</i>	1896
Louisville	Jefferson	Bank of Louisville <i>a</i>	1896
Lumpkin	Stewart	Bank of Stewart County <i>a</i>	1891
Macon	Bibb	American National Bank	
"	"	Central Georgia Bank <i>a</i>	1869
"	"	Commercial & Savings Bank <i>a</i>	1895
"	"	Exchange Bank <i>a</i>	1871
"	"	First National Bank	1865
"	"	Macon Savings Bank <i>a</i>	1875
"	"	I. C. Plant's Son <i>b</i>	1868
"	"	Georgia Loan & Trust Co. <i>a</i>	1883
"	"	Security Loan and Abstract Co. <i>a</i>	1892
"	"	Southern Loan & Trust Co. <i>a</i>	1893
"	"	Union Savings Bank & Trust Co. <i>a</i>	1890
Madison	Morgan	Bank of Madison <i>a</i>	1890
"	"	Morgan County Bank <i>a</i>	1899
Marietta	Cobb	First National Bank	1888
"	"	Marietta Trust & Banking Co. <i>a</i>	1892
Marshallville	Macon	M. S. Ware <i>b</i>	1888
Maysville	Jackson	H. and T. E. Atkins <i>b</i>	1891
McDonough	Henry	Bank of Henry County <i>a</i>	1896
McRae	Telfair	Merchants' Bank <i>a</i>	1894
Milledgeville	Baldwin	Merchants' & Farmers' Bank <i>a</i>	1898
"	"	Milledgeville Banking Co.	1884
Millen	Screven	Bank of Millen <i>a</i>	1893
Molena	Pike	Bank of Molena <i>a</i>	1899
Monroe	Walton	Bank of Monroe <i>a</i>	1891
"	"	George W. Felker <i>b</i>	1892
Montezuma	Macon	John F. Lewis & Son <i>b</i>	1871
Monticello	Jasper	Bank of Monticello <i>a</i>	1892
"	"	Jasper County Bank <i>a</i>	1898
Morgan	Calhoun	J. J. Beck <i>b</i>	1887
Moultrie	Colquit	Moultrie Banking Co. <i>a</i>	1896
Newnan	Coweta	First National Bank	1871
"	"	Newnan Banking Co. <i>a</i>	1894
Ocilla	Irwin	Bank of Ocilla <i>b</i>	1899
Oglethorpe	Macon	Bank of Oglethorpe <i>a</i>	1899
Palham	Mitchell	Hand Trading Co. <i>a</i>	1876
Perry	Houston	Perry Loan & Savings Bank <i>a</i>	1889
Poulan	Worth	Bank of Poulan <i>b</i>	1899
Quitman	Brooks	Bank of Quitman <i>a</i>	1889
"	"	Merchants' & Farmers' Bank <i>a</i>	1891
Reynolds	Taylor	Merchants' Bank <i>b</i>	1890
"	"	Reynolds Banking Co. <i>a</i>	1897
Richland	Stewart	Bank of Richland <i>a</i>	1890
Rochelle	Wilcox	Bank of Rochelle <i>b</i>	1898
Rome	Floyd	Exchange Bank of Rome <i>a</i>	1896
"	"	First National Bank	1877
Rutledge	Morgan	Bank of Rutledge <i>a</i>	1898
Sandersville	Washington	Banking House of Louis Cohen <i>b</i>	1890
"	"	Warthen and Irwin <i>b</i>	1895
Savannah	Chatham	Chatham Bank <i>a</i>	1889

a State. *b* Private.

TOWN	COUNTY	NAME OF BANK	WHEN ESTABLISHED
Savannah.....	Chatham.....	Citizens' Bank <i>a</i>	1888
".....	".....	Germania Bank <i>a</i>	1890
".....	".....	Merchants' National Bank.....	1866
".....	".....	National Bank of Savannah.....	1885
".....	".....	Savannah Bank & Trust Co. <i>a</i>	1869
".....	".....	Southern Bank of the State of Georgia <i>a</i>	1870
".....	".....	Oglethorp Savings & Trust Co. <i>a</i>	1887
".....	".....	Hull & Lathrop <i>b</i>	1890
Senoia.....	Coweta.....	Farmers' & Merchants' Bank <i>a</i>	1892
Sharon.....	Taliaferro.....	J. A. Kendrick's Bank <i>b</i>	1899
Shellman.....	Randolph.....	People's Bank <i>a</i>	1900
".....	".....	Shellman Banking Co. <i>b</i>	1890
Social Circle.....	Walton.....	Bank of Social Circle <i>a</i>	1892
Sparta.....	Hancock.....	Bank of R. A. Graves <i>b</i>	1887
Statesboro.....	Bulloch.....	Bank of Statesboro <i>a</i>	1894
Summerville.....	Chattooga.....	Bank of Commerce <i>a</i>	1891
Swainsboro.....	Emanuel.....	Bank of Swainsboro <i>a</i>	1896
Sylvester.....	Worth.....	Sylvester Banking Co. <i>a</i>	1897
Talbotton.....	Talbot.....	Peoples' Bank.....	1890
Tallapoosa.....	Haralson.....	Citizens' Bank <i>b</i>	1897
Tennille.....	Washington.....	Farmers' & Merchants' Bank <i>a</i>	1894
".....	".....	Tennille Banking Co. <i>a</i>	1900
Thomaston.....	Upson.....	Farmers' & Merchants' Bank <i>a</i>	1892
".....	".....	Upson Banking & Trust Co.....	1900
Thomasville.....	Thomas.....	Bank of Thomasville <i>a</i>	1888
".....	".....	Citizens' Banking & Trust Co. <i>a</i>	1891
".....	".....	Thomasville National Bank.....	1887
".....	".....	Oglethorpe Savings & Trust Co. <i>a</i>	1887
Thomson.....	McDuffie.....	Bank of Thomson <i>a</i>	1891
Tifton.....	Berrien.....	Bank of Tifton <i>a</i>	1895
Toccoa.....	Habersham.....	Toccoa Banking Co. <i>a</i>	1890
Unadilla.....	Dooly.....	Bank of Unadilla <i>b</i>	1897
Union Point.....	Greene.....	Bank of Union Point <i>b</i>	1900
Valdosta.....	Lowndes.....	Citizens' Bank of Valdosta <i>a</i>	1891
".....	".....	First National Bank.....	1890
".....	".....	Merchants' Bank of Valdosta <i>a</i>	1874
Vienna.....	Dooly.....	Bank of Vienna <i>a</i>	1889
".....	".....	J. P. Heard & Sons <i>b</i>	1899
Villa Rica.....	Carroll.....	Bank of Villa Rica <i>a</i>	1899
Warrenton.....	Warren.....	Bank of Warrenton <i>a</i>	1892
Washington.....	Wilkes.....	Washington Exchange Bank <i>a</i>	1889
".....	".....	Washington Loan & Banking Co. <i>a</i>	1895
Waycross.....	Ware.....	Bank of Waycross <i>a</i>	1894
".....	".....	Citizens' Bank <i>a</i>	1900
".....	".....	First National Bank.....	1894
Waynesboro.....	Burke.....	Bank of Waynesboro <i>a</i>	1891
".....	".....	Citizens' Bank <i>a</i>	1898
West Point.....	Troup.....	Bank of West Point <i>a</i>	1897
Winder.....	Jackson.....	Bank of Winder <i>a</i>	1895
".....	".....	Winder Banking Co. <i>a</i>	1899
Wrightsville.....	Johnson.....	Bank of Wrightsville <i>a</i>	1896

a State. *b* Private.

The Banks incorporated during the year 1901 by Hon. Philip Cook, Secretary of State, are:

Bank of Nashville, Rockmart Bank, Citizens' Bank of Swainsboro, Citizens' Bank of Moultrie, Bank of Willacoochee, Mount Vernon Bank, Sea Island Bank of Statesboro, Citizens' Bank of Vidalia, Bank of Graymont, Bank of Grantville, Bank of Covington, Bowen Banking Company, Bank of Randolph, Sandersville Bank, Citizens' Bank of Elberton, People's Bank of Lyons, Bank of Molena, Crawford County Bank, Bank of Swainsboro, Bank of Arlington, Shadburn Banking Company, Bainbridge State Bank, Bank of Oglethorpe, Screven County Bank and Roswell Bank.

The following are the railroads incorporated by the Secretary of State during the fiscal year just closed :

Statesboro and Register Railroad Company; Brunswick and Birmingham Railway Company; East and West Railroad of Georgia; Jacksonville, St. Mary's and Jesup Railroad Company; Dalton and Alaculsy Railroad Company; Gainesville and Dahlonega Electric Railroad Company; Atlanta and Birmingham Air Line Railway Company; Columbus and Arlington Railway Company; Flint River and Gulf Railway Company; North and South Macon Street Railway Company.

The Railroads also had their charters amended.

GEORGIA MANUFACTURES.

It was hoped that all the reports of the United States Census Bureau for 1900 concerning manufactures and agricultural products of each county would be completed in time to appear in the appendix to this volume, but such is not the case.

The following information, however, has been issued by the Census Bureau on Georgia Manufactures in 1900 :

	Per Cent. of Increase since 1890.
Number of establishments, 7,504	75.1
Capital, \$8,789,656	57.7
Wage earners, average number, 83,842	60.8
Total wages, \$20,344,071	89.1
Miscellaneous expenses, \$5,321,330	32.4
Cost of materials used, \$53,232,203	62.8
Value of products, including custom work and repairing, \$106,648,677....	54.7

ATLANTA.

Number of establishments, 395...	(1)	3.7
Capital, \$16,085,114		69.2
Wage earners, average number, 9,368		17.7
Total wages, \$3,106,039	(1)	3.1
Miscellaneous expenses, \$1,852,721		37.0
Value of products, including custom work and repairing, \$16,721,899.....		27.9

AUGUSTA.

Number of establishments, 388	(1)	11.8
Capital, \$9,016,619		16.0
Wage earners, average number, 7,138		24.9
Total wages, \$1,815,779		7.4
Miscellaneous expenses, \$618,938		17.5
Cost of materials used, \$6,244,286		15.0
Value of products, including custom work and repairing, \$10,069,750.....		8.9

MACON.

Number of establishments, 182	(1)	10.8
Capital, \$5,076,005		27.3
Wage earners, average number, 3,700		17.2
Total wages, \$1,047,607	(1)	0.9
Miscellaneous expenses, \$445,078		102.8
Cost of materials used, \$3,751,167		40.8
Value of products, including custom work and repairing, \$6,485,767.....		25.4

SAVANNAH.

Number of establishments, 155	(1)	36.5
Capital, \$5,716,491		6.3
Wage earners, average number, 2,870		18.6
Total wages, \$1,176,150		11.0.
Miscellaneous expenses, \$469,918	(1)	3.0
Cost of materials used, \$3,915,884		18.7
Value of products, including custom work and repairing, \$6,461,816		2.3

Figure (1) in percentage denotes decrease.

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